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# SUMMARIES

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# ALIGNMENTS

RESULT 1

c-Jun phosphorylation; c-Jun N-terminal kinase 3; Nootropic; neuroprotective; Alzheimer's disease; apoptosis; BMAL1; PBP1; KIAA1491; KIAA0596CT; JUK3. Inhibitors of c-Jun phosphorylation including BMAL1, BPL1, KIAA1491, KIAAA0596 and their derivatives, for medical compositions and drugs for treating neurodegenerative diseases e.g. Alzheimer's disease. Complete human KIAA1491 protein sequence. ż ADP09771 standard; protein; 786 (CELE-) CELESTAR LEXICO SCI INC. (DAUC ) DAIICHI PHARM CO LTD. 29-WAR-2002; 2002JP-00095291. 29-WAR-2002; 2002JP-00095390. 29-WAR-2002; 2002JP-00095442. 29-WAR-2002; 2002JP-00095486. 31-MAR-2003; 2003WO-JP004120. Doi H, Wada N, Nakajima H; (first entry) WPI; 2003-833621/77. N-PSDB; ADP09777. WO2003086462-A1. Homo sapiens. 29-JUL-2004 23-OCT-2003. ADP09771; ADP0977 

Claim 1; SEQ ID NO 1; 139pp; Japanese.

The present invention relates to inhibitors of c-Jun phosphorylation contain as active ingredient 1 or more peptides that have a function of interacting with c-Jun N-terminal kinase 3. Such peptides can inhibit the phosphorylation or transcription activation of c-Jun, and can also inhibit apoptosis of e.g. nerve cells. Proteins interacting with JNK3 were investigated in silico. Then, BMAL1, PBP1, KIAA1491 complete and KIAA0596CT proteins were identified and their interaction with JNK3

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confirmed. The present sequence represents the complete
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          c-uun phosphorylation; c-Jun N-terminal kinase 3; Nootropic;
neuroprotective; Alzheimer's disease; apoptosis; BMAL1; PBP1; KIAA1491;
KIAA0596CT;, JNK3.
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99.9%; Pred. No. 3.6e-227;
ive 0; Mismatches 1;
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29-WAR-2002; 2002JP-00095390.
29-WAR-2002; 2002JP-00095442.
29-WAR-2002; 2002JP-00095486.
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human KIAA1491 protein
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K, Kojima S, Otsuki T, Koga
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                                                                                                                                                                                                                                                                                                                    Human; full length cDNA; cDNA synthesis; oligo-capping
                                                                                                                                                                                               LPQDAQSGSGQRSQPSSLQPKSQASKPAYGNSPYWIN 786
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na T, Nagai
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                                                                                                                                                                                                                                                                                                                                                                                                   99JP-00194486.
2000JP-00118774.
2000JP-00183765.
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                                                                                                                                                                                                                                                      AAM93397 standard; protein;
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                                                                                                                                                                                                                                                                                      (first entry)
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N-PSDB; AAK94318.
                                                                                                                                                                                                                                                                                                      polypeptide,
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02-MAY-2000;
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enable the production of the full length cDNA easily without any special methods. The present sequence is a polypeptide encoded by a full length human cDNA of the invention. Note: The sequence data for this patent did not form part of the printed specification, but was obtained in CD-ROM format directly from BPO
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    786
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       VSVSSSTTGLPDMTGSVXNKTQTPDKQGFHAGTPPPFSLPSVLGSTGPLASGAAPGYAPP
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                                                                                                                                                                                                                                                       190 MPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNTSLSMT
                                                                                                                                                                                                                                                                                                                                       SAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSESAPGTI
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                                                                                                                                                                                                                Indels
                                                                                                                                                                         Length
                                                                                                                                                                    Score 3083; DB 4;
Pred. No. 8.2e-178;
; Mismatches 1;
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99.7%;
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                                                                                                                                                                                                                Conservative
                                                                                                                                                                                          Similarity
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98US-0098812P-
98US-0098812P-
98US-0099596P-
98US-0099598P-
98US-0099642P-
98US-0099642P-
98US-0099741P-
98US-0099763P-
98US-0099763P-
98US-0099763P-
98US-0099763P-
98US-0099763P-
98US-0099812P-
98US-010038P-
98US-010038P-
98US-010038P-
98US-010058P-
98US-010058P-
98US-010058P-
98US-010058P-
98US-010054P-
98US-010177P-
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98US-0101477P.
98US-0101479P.
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98US-0101741P.
98US-0101743P.
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                                                                                    (first entry)
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24-SEP-1998;
24-SEP-1998;
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23-SEP-1998;
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02-SEP-1998;
02-SEP-1998;
09-SEP-1998;
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09-SEP-1998
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                                                                 AAY99361;
                                    AAY9936
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                                                                                                                                                                                            This invention relates to a novel primers useful for synthesising full length cDNA molecules that encode human proteins. Specifically, it refers to secretory or membrane proteins that are potential therapeutic agents/ target molecules in the field of medicine, and in particular genes encoding proteins that are associated with signal transduction, glycoproteins and transcription. The present invention describes a method for efficiently cloning a full length human cDNA from both the 5' and 3' ends using the oligo-capping method. This polypeptide sequence is a full length human protein of the invention.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       NTANSLCLGGTPASASSSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYPI 489
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            550 PAQPQQSQSQTHHTAQQPFVNPALPPGYSYTGLPYYTGMPSAFQYGFTMFVPPASAKQHG 609
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                                                                                                                                                                                                                                                                                                                                                                                                           SAVQNSTYTTSVITSCSLISSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSESAPGTI 309
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                                                                                                                                                                                                                                                                                                                                                                                Gaps
                                                                                                                                          New oligonuclectide primers (810 cDNAs) useful for synthesizing full length human cDNAs.
                                                                             Isogai T, Hayashi K, Ishii S, Kawai Y;
na T, Nagai K, Kojima S, Otsuki T, Koga H;
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                                                                                                                                                                                                                                                                                                                        76.0%; Score 3083; DB 8; Length 597; 99.7%; Pred. No. 8.2e-178;
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                                                                                                                                                                          Example 1; SEQ ID NO 2994; 1340pp; English
                                                            (REAS-) RES ASSOC BIOTECHNOLOGY
       08-JUL-1999; 99JP-00194486.
11-JAN-2000; 2000JP-00118774.
02-MAY-2000; 2000JP-00183865.
07-JUL-2000; 2000EP-00114089.
                                                                                          Wakamatsu A, Sugiyama T,
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Best Local Similarity 99.7
Matches 595; Conservative
                                                                                  Nishikawa T,
                                                                                                               WPI; 2004-204755/20.
                                                                                                                                                                                                                                                                                                         Sequence 597 AA;
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541 PFLHILPAHQQPHSQLLHHHLPQDAQSGSGQRSQPSSLQPKSQASKPAYGNSPYWTN 597
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Human, PRO polypeptide; membrane bound protein; receptor; diagnosis; transmembrane; secretion; immunoadhesion; pharmaceutical; screening.
                                                                                                                                                                          Human PRO1197 (UNQ610) amino acid sequence SEQ ID NO:72.
AAY99361 standard; protein; 363
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98US-0098750P.
98US-0098803P.
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Wood WI;

Watanabe CK,

Smith V,

Gurney AL,

Goddard A, 2000-237871/20. N-PSDB; AAA37043

Baker K,

(GETH ) GENENTECH INC

New mammalian DNA sequences encoding transmembrane, receptor or secreted PRO polypeptides, useful for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interactions.

Claim 12; Fig 44; 773pp; English.

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98US-0101915P.
98US-0102240P.
98US-0102240P.
98US-0102330P.
98US-0102331P.
98US-0102331P.
98US-0102484P.
98US-0102484P.
98US-0102571P.
98US-0102571P.
98US-0103631P.
98US-0106032P.
98US-010806P.
98US-0108686P.
98US-0108686P.
98US-0108686P.
98US-0108686P.
98US-0108686P.
24-SEP-1998, 29-SEP-1998, 29-SEP-1998, 29-SEP-1998, 29-SEP-1998, 30-SEP-1998, 30-SE
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18-NOV-1998;
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17-NOV-1998
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        AAA37022 to AAA37144 encode the new isolated human transmembrane, receptor or secreted PRO polypeptides given in AAY99340 to AAY99462. The transmembrane and receptor PRO proteins can be used for screening of potential peptide or small molecule inhibitors of the relevant receptor/ligand interactions. The polypeptides and nucleotide sequences encoding then have various industrial applications, including uses as pharmaceutical and diagnostic agents. AAA37145 to AAA37330 represent PCR polypeptides from the present invention
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                                                                                                                                                                                                                                                                                                                     STSHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVTVPPPGLE
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                                                                                                                                                                                                                                                                            37.9%; Score 1536; DB 3; Length 363; 96.2%; Pred. No. 1.3e-84; tive 3; Mismatches 7; Indels ;
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                                                                                                                                                                                                                                                                         Query Match
Best Local Similarity 96.24
Matches 308; Conservative
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                                                                                                                                                                                                                                                        Sequence 363 AA;
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PRO polypeptide; mammal; tumour; cancer; human; cattle; horse; sheep; dog; cat; pig; goat; rabbit; tumour necrosis factor alpha; TNF-alpha; blood; chondrocyte cell; cell proliferation; cell differentiation; colon; adrenal; lung; breast; prostate; rectum; cervix; liver; genetic disorder.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequences AAU29024-AAU29328 represent PRO polypeptides of the invention.
The PRO polypeptides and their associated nucleic acids can be used to
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          P, Chen J, Desnoyers L, Goddard A, Godo
Smith V, Watanabe CK, Wood WI, Zhang Z;
                          Human PRO polypeptide sequence #126.
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28-MAR-2000; 2000US-0192655P.
29-MAR-2000; 2000US-0193053P.
30-MAR-2000; 2000US-0193053P.
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2000US-0194647P.
2000US-0195675P.
2000US-0195600P.
2000US-0196600P.
2000US-0196820P.
2000US-019821P.
2000US-019821P.
2000US-019835P.
2000US-019835P.
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2000W3-0187202P
2000W3-0189320P
2000W3-0189328P
2000W3-0189328P
2000W3-0199328P
2000W3-0190828P
2000W3-0190828P
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2000US-0201516P.
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20-DEC-2000; 2000WO-US034956
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18-DEC-2001 (first entry)
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N-PSDB; AAS46050
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17-MAY-2000;
22-MAY-2000;
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04-APR-2000;
11-APR-2000;
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                                                                                                                                    Homo sapiens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Pan J,
   The present invention relates to secreted and transmembrane proteins. These proteins and the DNA encoding them may be used as hybridization probes, in chromosome and gene mapping and in the generation of antisense RNA and DNA. They may also be used used to generate either transgenic animals or knockout animals which are in turn useful for development and screening of therapeutically useful reagents. The nucleic acids may also be used in gene therapy
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Hillan KJ;
Watanabe C
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                                                                                                                                                                                                                               Ferrara N,
                                                                                                                                                                                                                                             Gurney AL,
                                                                                                                                                                                                                             Baker KP, Botstein D, Desnoyers L, Eaton DL, F<sup>1</sup>
Gao W, Goddard A, Godowski PJ, Grimaldi CJ, Gui
Pan J, Paoni NF, Roy MA, Smith V, Stewart TA,
Williams PM, Wood WI;
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                                  99US-0141037P.
99US-014475BP.
99WG-01250111.
99WG-10520111.
99WG-10520113.
99WG-1052013.
99WG-1052013.
99WG-10520095.
         18-FEB-2000; 2000WO-US004342
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Matches 308; Conservative
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                                     23-JUN-1999;
20-JUL-1999;
26-JUL-1999;
01-SEP-1999;
29-OCT-1999;
30-NOV-1999;
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Gurney AL;

Godowski PJ,

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     detect the presence of a tumour in a mammal by comparing the level of expression of a PRO polypeptide in a test sample of cells from the animal and a control sample of normal cells, whereby a higher level of expression in the test sample indicates the presence of a tumour in the mammal. Mammals include dogs, cats, cattle, horses, sheep, pigs, goats and rabbits but are preferably human. The polypeptides can be used to stimulate tumour necrosis factor (TNF) alpha release from human blood, when contacted with it. A specific polypeptide can be used to stimulate the proliferation or differentiation of chondrocyte cells. The PRO protains can be used to determine the presence of tumours and also susceptibility to tumour development, particularly adrenal, lung, colon, casest, prostate, rectal, cervical, or liver tumours, in mammalian subjects. The oligonucleotide probes specific for the PRO nucleic acids can be used for genetic analysis of individuals with genetic disorders
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                                                                                                                                                                                                                                                                                                                                                                            ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT 248
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                                                                                                                                                                                                                               7 SSTAVNSCS--POSLSSVLGSGFGELAPPKMANITSSQILDOLKAPSLGQFTTTPSTQQN 64
                                                                                                                                                                                                                                           Human, PRO, cytostatic, tumour, cancer, breast, lung, stomach, liver,
dog, cat, cow, horse, sheep, pig, goat, rabbit, ADEPT,
antibody-dependent enzyme mediated prodrug therapy.
                                                                                                                                                                                                             2; Gaps
                                                                                                                                                                                     37.9%; Score 1536; DB 4; Length 363; 96.2%; Pred. No. 1.3e-84; tive 3; Mismatches 7; Indels 7
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97US-0059266P.
97US-0062250P.
97US-0063486P.
97US-0063120P.
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Best Local Similarity 96.2 Matches 308; Conservative
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17-OCT-1997;
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STSHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVTVPPPGLE 124
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                                                                                                                                                                                                                                                                                                         Gaps
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                                                                                                                                                                                                                                                                                    37.9%; Score 1536; DB 6; Length 363;
larity 96.2%; Pred. No. 1.3e-84;
Conservative 3; Mismatches 7; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Novel human secreted and transmembrane protein PRO1197.
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98US-0100683P.
98US-0100684P.
98US-0100930P.
98US-010014P.
98US-010114P.
98US-010114P.
98US-010147P.
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No. 13-782-1000

Mono saptemas

No. 13-782-1000
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PR 04-JUN-1998 | 98US-0088022P.
PR 04-JUN-1998 | 98US-008802B.
PR 04-JUN-1998 | 98US-008802B.
PR 05-JUN-1998 | 98US-0088126P.
PR 05-JUN-1998 | 98US-0088126P.
PR 05-JUN-1998 | 98US-0088121P.
PR 10-JUN-1998 | 98US-0088121P.
PR 10-JUN-1998 | 98US-0088121P.
PR 11-JUN-1998 | 98US-0088126P.
PR 11-JUN-1998 | 98US-0088126P.
PR 11-JUN-1998 | 98US-0088126P.
PR 11-JUN-1998 | 98US-0088126P.
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PR 22-JUN-1998 | 98US-0088126P.
PR 22-JUN-1998 | 98US-0088126P.
PR 22-JUN-1998 | 98US-0089598P.
PR 22-JUN-1998 | 98US-0099598P.
PR 22-JUN-1998 | 98US-0099598P.
PR 22-JUN-1998 | 98US-0099598P.
PR 22-JUN-1998 | 98US-0099659P.

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ABU84388 standard; protein; 363
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08-APR-1998

08-APR-1998

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26-APR-1998
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29-APR-1998;
29-APR-1998;
05-MAY-1998;
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11-MAR-1998;
11-MAR-1998;
20-MAR-1998;
20-MAR-1998;
27-MAR-1998;
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31-MAR-1998;
01-APR-1998;
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116-SEP-1997;
21-OCT-1997;
24-OCT-1997;
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31-OCT-1997;
11-DEC-1997;
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11-DEC-1997;
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15-MAY-1998;
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02-SEP-1998;

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03-SEP-1998;

10-SEP-1998;

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110-SEP-199
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RESULT

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Human; secreted and transmembrane protein; PRO; TNF-alpha;
tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
tissue typing.
                            Human secreted/transmembrane protein (PRO) #126.
                                                                                                                                                                                                                                                                             9710S - 0059263P.
9710S - 0053266P.
9710S - 0053120P.
9710S - 0053121P.
9710S - 0053541P.
9710S - 0063734P.
9710S - 0063734P.
9710S - 0063734P.
9710S - 0063734P.
9710S - 006373P.
9710S - 006373P.
9710S - 006373P.
9710S - 006373P.
9710S - 0069425P.
9710S - 0069439P.
9710S - 0069436P.
9710S - 0069436P.
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98US-0085579P.
98US-0085580P.
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entry)
(first
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RR 15-WAY-1998 980US-008552P.
RR 22-WAY-1998 980US-008653P.
RR 22-WAY-1998 980US-008653P.
RR 22-WAY-1998 980US-008653P.
RR 22-WAY-1998 980US-008632P.
RR 02-UW-1998 980US-008632P.
RR 03-UW-1998 980US-008632P.
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RR 11-UW-1998 980US-008632P.
RR 12-UW-1998 980US-00863P.
RR 12-UW-1998 980US-008
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8US - 009689 8US - 009689 8US - 009695 8US - 009702 8US - 009795 8US - 009797 8US - 009797 8US - 009801 8US - 009810 8US - 009810 8US - 009810 8US - 009810 8US - 009810 8US - 009976 8US - 009976	0099812 10006888 100068888 100068888 1001068888 1001014471 10114778 1001388	905-0101743 905-0101922 905-0101922 905-010230 905-010233 905-010233 905-010257 905-010257 905-010257 905-010257 905-010257 905-0102558 905-0103558
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185 ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT 244

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SYLLRICSFIPLIKSSYLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQN STSHPTTTTSWDLKPPTSQSSVLSHLDFKSQDEPSPVLSQLSQRQQHQSQAVIVPPPGLE

7 SSTAVNSCS--PQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQN

Query Match 37.9%; Score 1536; DB 6; Length 363; Best Local Similarity 96.2%; Pred. No. 1.3e-84; Matches 308; Conservative 3; Mismatches 7; Indels 3

124

64

2; Gaps

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9805-0084466P

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9805-0084414P

9805-0084414P

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248
                                           308
                          304
                                                                                                                                                                                         Human; PRO; secreted protein; transmembrane protein; extracellular domain; tumour necrosis factor-alpha; TNP-alpha; chondrocyte; proliferation; differentiation; cartilage disorder; bone disorder; arthritis; sports injury; cancer; tumour; diagnosis; adrenal tumour; lung; colon; breast; prostate; kidney; rectum; cervix; liver; drug screening; transgenic animal; genetic analysis; antiarthritic; vulnerary; gene therapy.
                         189 ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT
                                                                                                                                                                          Human secreted polypeptide PRO1197, SEQ ID NO:252
                                                                                                                          ABR66262 standard; protein; 363 AA
                                                                         APGTIMNGHGGGRSQQTLDT 324
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9705-0063250P
9705-0063120P
9705-0063121P
9705-0063540P
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98US-0081070P.
98US-0081195P.
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17-OCT-1997;
24-OCT-1997;
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31-OCT-1997;
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24-NOV-1997;
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1-MAR-1998;
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ABR66262
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184
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                                          89
         6
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                           SPPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPPASKIP
                                                                                                                                                                   SPPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPPASKIP
                                                                                                                                                                                                                  STSHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVTVPPPGLE
     7 SSTAVNSCS--PQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQN
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17-0CT-1997;
24-0CT-1997;
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28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
28-0CT-1997;
31-0CT-1997;
31-0C
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Pred. No. 1.3e-84;
3; Mismatches 7; Indels
98US-0090862P

98US-00910169

98US-0091339P

98US-0091339P

98US-0091328P

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tumour necrosis factor alpha; chondrocyte cell; tumour; gene therapy;
                                                                                                        Gaps
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7
                                                                                    Length 363;
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96.2%; Pred. No. 1.3e-84;
cive 3; Mismatches 7;
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23-SEP-1998;
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Human, gene therapy, tissue typing, tumour; chondrocyte proliferation,
chondrocyte differentiation, tumour necrosis factor-alpha release,
affinity purification.
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Pred. No. 1.3e-84;
3; Mismatches 7; Indels
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   98US-0100662P.
98US-0100664P.
98US-0101681P.
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98US-0100619P.
98US-0100919P.
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98US-0102240P.
98US-010231P.
98US-010231P.
98US-010254P.
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96.2%;
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Best Local Similarity 96.2
Matches 308; Conservative
    16-SEP-1998;

16-SEP-1998;

16-SEP-1998;

17-SEP-1998;

17-SEP-1998;

17-SEP-1998;

17-SEP-1998;

18-SEP-1998;

18-SEP-1998;

23-SEP-1998;

23-SEP-1998;

24-SEP-1998;

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24-SEP-1998;

25-SEP-1998;

25-SEP-1998;
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248 124 128 184 188 244 SLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES 304 64 68 Gaps SSTAVNSCS--PQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTT 2; Length 363 Indels 9 Query Match
37.9%; Score 1536; DB 6;
Best Local Similarity 96.2%; Pred. No. 1.3e-84;
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305 APGTIMNGHGGGRSQQTLDT 324

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309 APGIIMNGHGGGRSQOTLDS 328

Search completed: January 31, 2005, 17:43:30 Job time : 82 sec8

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(c) 1993 - 2005 Compugen Ltd.
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January 31, 2005, 17:39:37; protein search, using sw model • OM protein Run on:

; Search time 24 Seconds
(without alignments)
2171.914 Million cell updates/sec

US-10-509-307-1 4055 1 MAPGTGSSTAVNSCSPQSLS......LQPKSQASKPAYGNSPYWTN 786 Title: Perfect score: Sequence:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

478139 segs, 66318000 residues Searched:

478139 Total number of hits satisfying chosen parameters:

seq length: 0 seq length: 200000000 Minimum DB Maximum DB

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Issued Patents AA:\* Database

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

		de			SUMMARIES	
Result No.	Score	Query Match	Query Match Length D	DB	ID	Description
-	1248.5	30.8	983	4	US-09-538-092-1320	Sequence 1320, Ap
7	308.5	7.6	1140	4	US-09-538-092-647	Sequence 647, App
m	289.5	7.1	1306	4	US-09-538-092-330	330,
4	289	7.1	336	4	US-09-270-767-43343	
S	287.5	7.1	2870	4	US-09-479-467A-15	
9	287.5	7.1	3178	4	US-09-479-467A-4	-
7	286.5	7.1	2090	4	US-09-538-092-1081	
<b>œ</b>	282.5	7.0	2137	m	US-09-134-001C-4463	
თ	273.5	6.7	2972	m	US-09-579-181-2	••
10	273.5	6.7	3118	m	US-09-579-181-1	٠.
11	269	9.9	827	4	US-09-248-796A-17307	1730
12	260.5	6.4	2004	4	US-09-854-856-58	٠,
13	260.5	6.4	2032	4	US-09-854-856-42	4
14	260.5	6.4	2064	4	US-09-854-856-26	26,
15	260.5	6.4	2092	4	US-09-854-856-10	
16	260.5	6.4	2141	4	US-09-854-856-56	56,
17	260.5	6.4	2157	4	US-09-854-856-52	52,
18	260.5	6.4	2169	4	US-09-854-856-40	40,
19	260.5	6.4	2185	4	US-09-854-856-36	36,
20	260.5	6.4	2201	4	ÙS-09-854-856-24	24,
21	260.5	6.4	2217	4	US-09-854-856-20	20,
22	260.5	6.4	2229	4	US-09-854-856-8	ω,
23	260.5	6.4	2245	4	US-09-854-856-4	4
24	260.5	6.4	2294	4	US-09-854-856-50	20,
25	260.5	6.4	2322	4	US-09-854-856-34	34,
56	260.5	6.4	2354	4	US-09-854-856-18	18,
27	260.5	6.4	2382	4	US-09-854-856-2	2,7

Sequence 64, Appl Sequence 48, Appl	Sequence 32, Appl Sequence 16, Appl	Sequence 62, Appl Sequence 46, Appl	Sequence 30, Appl Sequence 14, Appl	1378	Sequence 7, Appli Sequence 7, Appli	7,2	5	Sequence 2, Appli	Sequence 2, Appli Sequence 26, Appl
US-09-854-856-64 US-09-854-856-48	US-09-854-856-32 US-09-854-856-16	US-09-854-856-62 US-09-854-856-46	US-09-854-856-30 US-09-854-856-14	US-09-538-092-1378 US-08-993-118-7	US-08-845-528C-7 US-09-066-281B-7	US-09-468-433C-7	PCT-US94-04496-55	US-09-061-709-2	US-09-899-651-2 US-09-392-714-26
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7 7 8 7 8	30	332	34 35	36	8 6 8 6	40	42	43	44 45

### ALIGNMENTS

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Sequence 1320, Application US/09538092
Sequence 1320, Application US/09538092
Fatent No. 6753314
GENERAL INFORMATION:
APPLICANT: 616t, Loid,
TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same
FILE REFERENCE: 1596-542
CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT APPLICATION NUMBER: 60/127,352
FRIOR APPLICATION NUMBER: 60/127,352
FRIOR APPLICATION NUMBER: 60/127,352
FRIOR APPLICATION NUMBER: 60/127,352
FRIOR PILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CuraPatSeqFormatter Version 0.9
LENGTH: 983
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          62 QONSTSHPITITSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQ----- 109
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  110 -QHQSQAV----TVPPPGLESFPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQ 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       165 PQPKHIKLAKRRIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAP-SS 223
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              224 ENSNOIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSS 283
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                                                                                                                                                                                                                                                                                                                                                                                                                                         FEATURE:

NAME/KEY: misc_feature

LOCATION: (0)...(0)

OTHER INFORMATION: Polypeptide Accession Number Q14157
US-09-538-092-1320
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JS-09-538-092-1320
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Sequence 330, Application US/09538092

Patent No. 6753314

GENERAL INFORMATION:

APPLICANT: Glot, Loic

APPLICANT: Glot, Loic

TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same

TILE REFERENCE: 15966-54

CURRENT APPLICATION NUMBER: US/09/538,092

CURRENT FILING DATE: 2000-03-29

PRIOR PLILNG DATE: 1999-04-01

PRIOR PLILNG DATE: 1090-04-01

PRIOR PLILNG DATE: 1000-02-01

PRIOR PLING DAUS: 1387

SOFTWARE: CURAPALSEGFORMATTER VERSION 0.9
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                                          381 SSEAPSSTSSSVSSE--APSSTSSSVSSEAPSS---TSSSVSSEISSTKSSVMSSEVSSA
                                                                                             221 PSSENSNQIP---ISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASP
                                                                                                                                                                                                                                          486 TLASNSIIESSLST--GYNSTVSTTTSAASSTL-GSKVSSSNSRMATSKTSSTSSDLSKS
                                                                                                                                                                                                                                                                                                                        440 TPASASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYPIYGYDELQ---
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US-09-538-092-330
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                                                                                                                        SSLP---STTSCTALLPSTSQHTG-----DLTSSPLSQLSSSLSSHQSSLSAHAAL 385
                                                                                                                                                                                                                      386 SSSTSHT--HASVES-ASSHQSSATFSTAATSVSSSASSGVSLSSSMNTANSLCLGGTPA 442
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                                                                    YEORSTOTR-RYPSSISSPOKDLTOAKNGFSSVQATOLOTTOSVEGATGSAVKSDSPST 650
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Patent No. 6753314

GENERAL INCRRANTION

APPLICANT: Giot, Loic

APPLICANT: Giot, Loic

TITLE OF INVENTION: Protein-Protein Complexes and Method of Using Same

TILE REFERENCE: 15966-542

CURRENT APPLICATION NUMBER: US/09/538,092

CURRENT PILING DATE: 2000-03-29

PRIOR FILING DATE: 1999-04-01

PRIOR FLING DATE: 2000-02-01

PRIOR PLING DATE: 2000-02-01

PRIOR PLING DATE: 2000-02-01

NUMBER OF SEQ ID NOS: 1387

SOFTWARE: CIRAPATSEGGFORMATTER Version 0.9
                                                                                                                                                                                                                                               266 SATSSSVSSEASSTSSSVSSEAPLATSSVVSS---EAPSSTSSVVSSEAPSSTSSSVSS
                         --- PSALPSV
                                                                                                                                                                                                                                                                                                                   SASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYP--IYGYDELQMLQS
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                         YDQSSVHNRIPYQSPVSSSESAPGT-IMNGHGGGRSQQTLDTPKTTGP--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Polypeptide Accession Number YMR317W US-09-538-092-647
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              GTGS--STAVNSCSPQSLSSVLGSGFGELAPPKMANIT---
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             614 TPTPPFQQASGYGQHGYSTG 633
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LOCATION: (0)...(0)
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US-09-538-092-647
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                                                                                                                                                                                                                                                                                                            PEPSPVLSQLSQRQQHQSQAVTVPPPGLESFPSQAKLRESTPGDSPSTVNKLLQLP--ST 153
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TIENISVSVHQPQPKHIKLAKRRIPPASKIPA-SAVEMPGSADVTGLNVQFGAL----E 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       STSN-SFSIVSPS------VSFVPSQSSSDVASSSTANVVSSFFDIPPQTST 396
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           520 RDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPQQSQSQTHHTAQQPFVNPALPPGYSY 579
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                                                                                                                                                                                                                                                                             2 APGIGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANIT---SSQILDQ-----LKAPSL
                                                                                                                                                                                                                                                                                                                                                                                 GQFTTT-----PSTQQNSTSHPTTT-TSWDLKP-PTSQSS------VLSHLDFKSQ
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                                                                                                                                                                        Query Match 7.1%; Score 289.5; DB 4; Length 1306; Best Local Similarity 24.0%; Pred. No. 5e-11; Matches 211; Conservative 110; Mismatches 365; Indels 193;
                                                                    ; LOCATION: (0)...(0); OTHER INFORMATION: Polypeptide Accession Number YGR014W US-09-538-092-330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TINTINVQTSLTTESTTVLEPSTTNSSSTFSLVTSSDNNWW 961
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ORGANISM: Saccharomyces cerevisiae FEATURE:
                                                    NAME/KEY: misc_feature
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APPLICANT: Sternberg, Paul W.
APPLICANT: Barr, Maureen M.
TITLE OF INVENTION: POLYCYSTIC KIDNEY DISEASE GENE HOMOLOGS REQUIRED FOR MALE MAT
TITLE OF INVENTION: BEHAVIOR IN NEMATODES AND ASSAYS BASED THEREON
FILE REFERENCE: 18021-2901B
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             19;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Homburger et al.
TITLE OF INVENTION: Nucleic acids and proteins of Drosophila melanogaster FILE REFERENCE: FILE Reference: 7326-094
CURRENT APPLICATION NUMBER: US/09/270,767
CURRENT FILING DATE: 1999-03-17
NUMBER OF SEQ ID NOS: 62517
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 43343
LENGTH: 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         491 GYDELOMLOSRLPVDYYGIPFAAPTALASRDRSLANNPYPGDVT-----KFGRGD-SA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SPAPATTPAQPQQSQSQTHHTAQQPFVNPALPPGYSYTGLPYYTGMPSAFQYG-PTMFVP
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         661 SAGSGPGKGVSVSSSTTGLPDMTGSVY-----NKTQTFDKQGFHAGTPPPFSLPSVLG
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                                                                                                                                                                                                                                                                                                                                                                                                                                        ; Score 289; DB 4; Length 336;
; Pred. No. 8.3e-12;
44; Mismatches 103; Indels
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ORGANISM: C. Elegans Lov-1 sy582 deletion protein
                                                                                                                                                                                                                                                                                                                                                         ; OTHER INFORMATION: Xaa means any amino acid US-09-270-767-43343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    CURRENT APPLICATION NUMBER: US/09/479,467A
CURRENT FILING DATE: 2000-01-06
PRIOR PILING DATE: 60/115,127
PRIOR FILING DATE: 1999-01-06
NUMBER OF SEQ ID NOS: 16
SOFTWARE: Patentin Ver. 2.0
Sequence 43343, Application US/09270767
Patent No. 6703491
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ; Sequence 15, Application US/09479467A; Patent No. 6723557; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                            TYPE: PRT
ORGANISM: Drosophila melanogaster
                                                                                                                                                                                                                                                                                                                                                                                                                                             7.1%;
                                                                                                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity 31.5%
Matches 98; Conservative
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                                                  62 QQNSTSHPTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQ--QHQSQAVTVP
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APGTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITISSQILDQLKAPSLGQFTTTPST
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AFFLICANT: BATT, MAUREEN M.

TITLE OF INVENTION: POLYCYSTIC KIDNEY DISEASE GENE HOMOLOGS REQUIRED FOR MALE MATJ
TITLE OF INVENTION: BEHAVIOR IN NEMATODES AND ASSAYS BASED THEREON
FILTE OF INVENTION: BEHAVIOR IN NEMATODES AND ASSAYS BASED THEREON
FILTE OF INVENTION: BLADL-2901B
CURRENT APPLICATION NUMBER: US/09/479,467A
CURRENT FILING DATE: 2000-01-06
PRIOR APPLICATION NUMBER: 06/115,127
PRIOR APPLICATION NUMBER: 06/115,127
PRIOR FILING DATE: 1999-01-06
NUMBER OF SEQ ID NOS: 16
SOFTWARE: PATENTI VOF. 2.0
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                                                                                                                                                                                                                                                                                                                            7.1%; Score 287.5; DB 4; Length 3178; larity 20.9%; Pred. No. 2.3e-10; Conservative 122; Mismatches 349; Indels 339;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PPGLESFPSQAKLRESTPGDSPSTVNKLLQLPST----
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                      Sequence 4, Application US/09479467A Patent No. 6723557 GENERAL INFORMATION: APPLICANT: Sternberg, Paul W.
                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: C. Elegans Lov-1 protein
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SEQ ID NO 4
LENGTH: 3178
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Matches 214;
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RESULT 6
JS-09-479-467A-4
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Sequence 4463, Application US/09134001C

Sequence 4463, Application US/09134001C

GENERAL INFORMATION:
GENERAL INFORMATION:
TITLE OF INVENTION: BUIDERMIDIS FOR DIAGNOSTICS AND THERAPEUTICS
TITLE OF INVENTION: BPIDERMIDIS FOR DIAGNOSTICS
TITLE OF INVENTION WHERE: US 60/064,964
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-11-08
PRIOR FILING DATE: 1997-08-14
NUMBER OF SEQ ID NOS: 5674
SEQ ID NO 4463
LENGTH: 2137
                                                                                                                                                                                                                                                                                                                                                           1292 SSRPVAPSGTAL--STTSSKLETPPSKLGELLFPSSLAGETLGSFSGLRVGQADDSTKPT 1349
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                                                                                                   1193 TAKİETAVTSTPSASGQFSKPFSFSPSGTGFNFGIITPTPSSNFTAAQGATPSTKESSQP 1252
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                                                                                                                                                                     VAMSSSYDQSSVHNRIPYQSPVSSSESAPGTIMNGHGGGRSQQTLDTPXTTGPPSALPSV 337
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                                         SNOIPISLYSK----SLSEPLNTSLSMTS---AVQNSTYTTSVITSCSLTSSSLNSASP
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                                                                                                                                                                                                                                      1253 DAFSSGGGSKPSYEAIPESSPPSGITSASNT-----
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                                                                                                                                                                                                                                                           1028 KESNCLTEFGKNGAYSASVSFNPMTSFVPATGTYEFLINVTNRASGESASHIFTMNVVLP 1087
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TTDASQDSSTSTSDSGTTSDSTTIDSSNSTPSTSDSSGLSQTPSDSSSASDSMRTTTVDP 967
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APPLICANT: Mansfield, Traci A.
TITLE OF INVENTION: Procein-Protein Complexes and Method of Using Same:
TITLE OF INVENTION: Procein-Protein Complexes and Method of Using Same:
FILE REFERENCE: 1596-542
CURRENT APPLICATION NUMBER: US/09/538,092
CURRENT FILING DATE: 2000-03-29
PRIOR APPLICATION NUMBER: 60/127,352
PRIOR FILING DATE: 1999-04-01
PRIOR PILING DATE: 1999-04-01
PRIOR FILING DATE: 1999-04-01
PRIOR FILING DATE: 2000-02-01
NUMBER OF SEQ ID NOS: 1387
SOFTWARE: CuraPatSeqFormatter Version 0.9
SEQ ID NO 1081
LENGTH: 2090
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OTHER INFORMATION: Polypeptide Accession Number P35658
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                                                                                                                                                                                                    ---TGMPSA-FQYGP-TMFVPPASAKQHGVNL-
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Patent No. 6753314
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                                                                                         NSTS---TSISESLSTSVSDSTSTSTSDSAS---TSTSVSDSASTSSSESVST----
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                                                               5 TGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITSSQILDQLK-APSLGQFTTTPSTQQ
                       Indels 153;
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APPLICANT: Yaciuk, Peter
TITLE OF INVENTION: SNF2 Related CBP Activator Protein (SRCAP)
FILE REFERENCE: 16153-4247
CURRENT APPLICATION NUMBER: US/09/579,181
CURRENT FILING DATE: 2000-05-25
PRIOR APPLICATION NUMBER: 60/136,620
PRIOR APPLICATION NUMBER: 60/136,620
PRIOR PILING DATE: 1999-05-27
NUMBER OF SEQ ID NOS: 17
SSOFTWARE: Patentin Ver. 2.0
SEQ ID NO 2
LENGTH: 2972
il Similarity 21.3%; Pred. No. 2.9e-10;
157; Conservative 108; Mismatches 319;
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US-09-579-181-2
; Sequence 2, Application US/09579181
; Patent No. 6365372
; GENERAL INFORMATION:
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                                                                                  1 MAPGTGSSTAVNSCSPQSLSSVLG--SGFG------ELAPPKWANIT-----SSQI
6.7%; Score 273.5; DB 3; Length 2972; 24.1%; Pred. No. 1.9e-09; tive 94; Mismatches 323; Indels 265;
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                      al Similarity 24.18
217; Conservative
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Sequence 1, Application US/09579181 Patent No. 6365372

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24.1%; Pred. No. 2e-09;
Live 94; Mismatches 323; Indels 265;
            APPLICANT: Chrivia, John
APPLICANT: Yaciuk, Peter
TITLE OF INVENTION: SNP2 Related CBP Activator Protein (SRCAP)
FILE REPERENCE: 1613-4247
CURRENT APPLICATION NUMBER: US/09/579,181
CURRENT FILING DATE: 2000-05-25
PRIOR PILING DATE: 1999-05-27
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTIN Ver. 2.0
SEQ ID NO 1
LENGTH: 3118
                                                                                                                                                                                                                                                                                                 Query Match
Best Local Similarity 24.18
Matches 217; Conservative
GENERAL INFORMATION:
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US-09-579-181-1
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Pacent No. 674137

Patent No. 674137

Patent No. 674137

RECORDERAL INFORMATION:

APPLICANT: Keith Weinstock et al

TITLE OF INVENTION:

FILE REPERENCE: 107196.132

CURRENT APPLICATION NUMBER: US/09/248,796A

PRIOR PAPLICATION NUMBER: US 60/074,725

PRIOR APPLICATION NUMBER: US 60/074,725

PRIOR APPLICATION NUMBER: US 60/096,409

PRIOR APPLICATION NUMBER: US 60/096,409

PRIOR PILING DATE: 1998-08-13

NUMBER OF SEQ ID NOS: 28208

SEQ ID NO 17307
                                           -----ASTQSPASQASSLVVS---ASGAAP--LPV 1722
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670 VSVSSSTTGLPDMTGSVYNKTQTFDKQGFHAGTPPPFSLPSVLGSTGPLASGAAPGYAPP 729
                                                                                                                TWVSRLPVSKDE------PDTLTLRSGPPSPPSTATSFGGPRPRRQPPPPRSPFY 1772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      80 PTSQSSVLSHLDFKSQPEPSPV----LSQLSQRQQHQSQAVTVPPPGLESFPSQAKLRE 134
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                                                                                  730 PFLHILPAHQQPHSQLLHHHLPQDAQSGSGQRSQPSSLQ----PKSQASKPAYGNSPYW 784
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Best Local Similarity 22.5%; Pred. No. 6.5e-10;
Matches 171; Conservative 102; Mismatches 314; Indels 174; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         ; ORGANISM: Candida albicans
US-09-248-796A-17307
                                           1687 PAAAQTLALAP
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Db 1130 IQSEVTVPTEEGIAGVATSTGVVTSGGLPIPPVSESPVLSSVVSSITIPA 1179  Qy 337 VSSLPSTTSCTALLPSTSQHTGDLTSSP	1360 PPLVQE 501 RLPVDY 1417 KLRSLE; 1317 TLRSLE; 533 VTKFGF; 1473 -TNLPP 592 FQYGPJ 1531 TLP2 652 AGSSQJ 652 AGSSQJ 652 AGSSQJ 653 MKTQTJ 748 HHLPQJ	WESULE 13.  USS-09-884-856-42  IS SEQUENCE 4.2. Application US/09854856  FACENT MO. 6541252  GENERAL INFORMATION:  APPLICANT: Walke.  APPLICANT: Holbun, Erin  APPLICANT: Turner, C. Alexander Jr.  APPLICANT: Turner, C. Alexander Jr.  APPLICANT: Turner, C. Alexander Jr.  TITLE OF INVENTION: Bnccding the Same FILE REFERENCE: LEX-0178-USA  CURRENT APPLICATION NUMBER: US/09/854,856  CURRENT APPLICATION NUMBER: US/09/854,856  CURRENT APPLICATION NUMBER: US/09/65.015  FRIOR FILING DATE: 2000-05-19  SPRIOR FILING DATE: 2000-05-19  SOFTWARRE: FastSEQ for Windows Version 4.0  SOFTWARRE: PastSEQ for Windows Version 4.0  SOFTWARRE: Homo sapiens  FEATURE:  NAME/KEY: VARIANT: Homo sapiens  FEATURE:  NAME/KEY: VARIANT:  OTHER INFORMATION: Xaa = Any Amino Acid  US-09-854-856-42  Guery Match  Best Local Similarity 20.6%; Fred. No. 8.5e-09;
Db 542DINSAQYSAPTSNADAETASSPVSEQSLATGSQTSLDTTAGASSTASEATAENLSTFG 599  Qy 549 TPAQPQGSQSQTHHTAQQPFVNPALPPGYSYTGLPYYTGMPSAPQ 593	f. Human Kinases and Polymuc Same 854,856 6,015 ion 4.0	Query Match

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Sequence 26, Application US/09854856
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                                                                                                                                                                                                                                                                                                                              1106 PNTAPPNFSHTGPTFPVVPPFLSSIAGVPTTAAATAPVPA------TSSPPNDISTSV 1157
                                                                                                                                                                                                                                                                                                                                                                                                                                          1208 VVSISTTSPSLQVPISTSEIVVSSTALYPSVTVSATSASAGGSTATPGPKPPAVVSQQAA 1267
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1268 GSTTVGATLTSVSTTTSFPSTASQLSIQLSSSTSTPTLAETVVVSAHSLDKTSHSSTTGL 1327
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                                                      872
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                                                                                                      873 VPSSSGRHEGRITKRHYRKSVRSRSRHEKTSRPKLRILNVSNKGDRVVECQLETHNRKAN 932
                                                                                                                                                      LES-----PPSQAKLRESTPGDSP-STVNKLLQLPSTTIENISVS-----VHQPQPK 168
                                                                                                                                                                                                                                               169 HIKLAKRRIPPA---SKIPASAVEMPGSADVTGLNVOFGALEFGSEPSLSEFGSAPSSEN 225
                                                                                                                                                                                                                                                                                                                                                           DQSSVHNRIPYQSPVSSSESAPGTIMNGHGGGRSQQTLDTPKTTGPP-----SALPS 336
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              409 STAATSVSSSASSGVSLSSSMNTANSL-----CLGGTPASASSSSSRAAPLVTS-GKA 460
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                                                                                                                                                                                                                                                                                                      SNQIPISLYSKSLSEP-LNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSY 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                      365 -----LSQLSSSLSSHQSSLSAHAALSSSTSH---THASVESA-----SSHQSSATF 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   PP-----NLPQGVPPLLHNQYLVGPGGLLPAYP------IYGYDELQMLQS 500
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              533 VTKFGRGDSASP-APATTPAQPQSQSQTHHTAQQPFVNPALPPGYSYTGLPYYTGMPSA 591
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                                                813 APTTSSQQAVLESTQGVSQVAPAEPVAVAQPQATQPTTLASSVDSAHSDVASGMSDGNEN
                                                                                                                                     TTSWDL--KPPTSQSSVLSHLDFKSQPEPSPVLSQ----LSQRQQHQSQAVTVPP---PG
                         ----NSCSPQSLSSVLGSGFGELAPPKM---AN
                                                                                 TT4HSTSNOOTS----
204; Conservative 141; Mismatches 370; Indels 273; Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                  337 VSSLPSTT-----SCTALLPS----TSQHTGDLTSSP-
                                                                               38 ITSS------QILDQLKAPSLGQFTTTP-
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RESULT 14 US-09-854-856-26

43; 965 TFKFDLDGDNPERIATIMVNNDFILAIÈRESFVDQVREIIEKADEMLSEDVSVEPEGDQG 1024 1138 PNTAPPNFSHTGPTFPVVPPFLSSIAGVPTTAAATAPVPA------TSSPPNDISTSV 1189 300 GSTIVGAILISVSTITSPSIASQLSIQLSSSTSTPILAETVVVSAHSLDKTSHSSITGL 1359 1025 LESLQGKDDYGFSGSQKLEGEFKQPIPASSMPQQIGIPTSSLTQVVHSAGRRFIVSPVPE 1084 TISWDL--KPPTSQSSVLSHLDFKSQPEPSPVLSQ----LSQRQQHQSQAVTVPP---PG 122 123 LES------FPSQAKIRESTPGDSP-STVNKLLQLPSTTIENISVS-----VHQPQPK 168 169 HIKLAKRRIPPA---SKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSEN 225 226 SNQIPISLYSKSLSEP-LNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSY 284 285 DQSSVHNRIPYQSPVSSSESAPGTIMNGHGGGRSQQTLDTPKTTGPP-----SALPS 336 461 PP-----INDPGGVPPLLHNQYLVGPGGLLPAYP------IYGYDELQMLQS 500 905 VPSSSGRHEGRITKRHYRKSVRSRSRHEKTSRPKLRILNVSNKGDRVVECQLETHNRKMV 964 -----LSQLSSSLSSHQSSLSAHAALSSSTSH---THASVESA----SSHQSSATF 408 409 STAATSVSSSASSGVSLSSSMNTANSL-----CLGGTPASASSSSSRAAPLVTS-GKA 460 ## SERVERL NO. 654155
## SERVERL INFORMATION:
## APPLICANT: Walke, D. Wade
## APPLICANT: Walke, D. Wade
## APPLICANT: Donoho, Gregory
## APPLICANT: Donoho, Gregory
## APPLICANT: Thiner, C. Alexander Jr.
## TITLE OF INVENTION: Encoding the Same
## TITLE OF INVENTION: Encoding the Same
## TITLE OF INVENTION: Encoding the Same
## CURRENT APPLICATION NUMBER: US/09/854,856
## PRIOR APPLICATION NUMBER: US/09/854,856
## PRIOR APPLICATION NUMBER: US/09/6,015
## PRIOR APPLICATION NUMBER: US/06,015
## SOFTWARE PASEQ FOR Windows Version 4.0
## SEQ ID NO 26
## ILENGTH: 2064 2 APGTGSSTAV----ANSCSPQSLSSVLGSGFGELAPPKM---AN 38 ITSS-----STQQLKAPSLGQFTTTP-----STQQNSTSHPTT Indels 273; Length 2064; 337 VSSLPSTT-----SCTALLPS----TSQHTGDLTSSP-Query Match
6.4%; Score 260.5; DB 4;
Best Local Similarity 20.6%; Pred. No. 8.6e-09;
Matches 204; Conservative 141; Mismatches 370; , LOCATION: (1)...(2064)
; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-26 ORGANISM: Homo sapiens 8 셤

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                                                                                              1533 -TNLPLGTVALPVTPVVTPGQVSTPVSTT-TSGVKPGTAPSKPPLTKAPVLPVGTELPAG 1590
                          1477 KLRSLFSEHSSSGAQHASVSLETSLVIESTVTPGIPTTAVAPSKLLTSTTSTCLPP---- 1532
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-GIP--FAAPTALASRDRSLANNPYPGD 532
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                APPLICANT: Walke, D. Wade
APPLICANT: Walke, D. Wade
APPLICANT: Hilbun, Erin
APPLICANT: Donoho, Gregory
APPLICANT: Donoho, Gregory
APPLICANT: Turner, C. Alexander Jr.
TITLE OF INVENTION: Encoding the Same
FILE REFERENCE: LEX-0179-USA
FILE REFERENCE: LEX-0179-USA
CURRENT APPLICATION NUMBER: US/09/854,856
CURRENT FILING DATE: 2001-05-14
PRIOR FILING DATE: 2000-05-14
PRIOR FILING DATE: 2000-06-19
NUMBER OF SEQ ID NOS: 64
SOFTWARE: PastSEQ for Windows Version 4.0
LENGTH: 2092
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                                                                533 VTKFGRGDSASP-APATTPAQPQSQSQTHHTAQQPFVNPALPPGYSYTGLPYXTGMPSA
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; OTHER INFORMATION: Xaa = Any Amino Acid
US-09-854-856-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 10, Application US/09854856
Patent No. 6541252
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Patent No. 6541252
; GENERAL INFORMATION:
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        RLPVDYY-
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                                                                             1166 PNTAPPNESHTGPTFPVVPPFLSSIAGVPTTAAATAPVPA-----TSSPPNDISTSV
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                                                    SNOIPISLYSKSLSEP-LNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSY
HIKLAKRRIPPA---SKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSEN
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Search completed: January 31, 2005, 17:47:58 Job time: 29 secs

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

# SUMMARIES

			Appl	App	App	App	App								
		_	72,	252,	252,	-	252,	_		252,		252,	252,	252,	252,
		Description	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Sequence	Seguence	Sequence
OUTHER			US-09-946-374-72	0-052-586-252	0-174-590-252	0-176-758-252	0-175-737-252	0-174-581-252	0-176-483-252	0-176-749-252	0-176-914-252	US-10-176-915-252	0-173-706-252	0-175-738-252	0-175-752-252
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# ALIGNMENTS

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US-09-946-374-72

Sequence 72, Application US/09946374

Publication No. US20030073129A1

GENERAL INFORMATION:

Publication No. US20030073129A1

GENERAL INFORMATION:

APPLICANT: Botstein, David

APPLICANT: Betstein, David

APPLICANT: Betstein, Dan L.

APPLICANT: Betstein, Dan L.

APPLICANT: Ford, Wel-Oiang

APPLICANT: Ford, Wel-Oiang

APPLICANT: Godowski, Paul J.

APPLICANT: Godowski, Paul J.

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APPLICANT: Pani, Janes

APPLICANT: Pani, Janes

APPLICANT: Smith, Victoria

APPLICANT: Smith, Victoria

APPLICANT: Watanab Daniel

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APPLICANT: Watanab Colin K.

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APPLICANT: Watanab Colin K.

APPLICANT: Watanab Daniel

APPLICANT: Watanab Daniel

CURRENT APPLICATION NUMBER: 60/098716

PRIOR APPLICATION NUMBER: 60/098723

PRIOR FILING DATE: 1998-09-01

PRIOR FILING DATE: 1998-09-01

PRIOR FILING DATE: 1998-09-01
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APPLICANT: Codeard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Godreski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: APPLICANT: Canage, Zemin I.
APPLICANT: APPLICANT: Alang, Zemin
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FILE REFERENCE: P3430R1C1
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Best Local Similarity 96.2%; Pred. No. 3.5e-79;
Matches 308; Conservative '3; Mismatches 7
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APPLICANT: Baker Kevin P.
APPLICANT: Chen, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             309 APGTIMNGHGGGRSQQTLDS 328
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65 SISHPITITSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVIVPPPGLE. 125 SPPSQAKIRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPPASKIP 189 ASAVEMPGSADVTGLNVOPGALEFGSEPSLSEFGSAPSSENSNOIPISLYSKSLSEPLNT 249 SLSWISAVQNSTYTTSVITSCSLISSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSSS 185 ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT 245 SLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES 7 SSTAVNSCS--PQSLSSVLGSGFGELAPPKWANITSSQILDQLKAPSLGQFTTTPSTQQN Gaps 5; Query Match
Best Local Similarity 96.2%; Pred. No. 3.5e-79;
Matches 308; Conservative 3; Mismatches 7; Indels 2 US-10-14-300-250 Sequence 252, Application US/10174590 Publication No. US20030008352A1 GENERAL INFORMATION: APPLICANT: Chen, Jian APPLICANT: Chen, Jian APPLICANT: Goddard, Audrey APPLICANT: Goddard, Audrey APPLICANT: Goddwski, Paul J. PRIOR APPLICATION NUMBER: 60/088738
PRIOR FILING DATE: 1998-06-10
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PRIOR PILING DATE: 1998-06-17
PRIOR PILING DATE: 1998-06-17 305 APGTIMNGHGGGRSQQTLDT 324 APGTIMNGHGGGRSQQTLDS 328 RESULT 3 US-10-174-590-252 309 셤 Š 원 à В 8 g ò

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Sequence 252, Application US/10175737; Publication No. US20030013153A1
; GENERAL INFORMATION:
; APPLICANT: Baker, Kevin P.
; APPLICANT: Chen, Jian
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    309 APGTIMNGHGGGRSQQTLDS 328
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305 APGTIMNGHGGGRSQQTLDT 324
 ; TYPE: PRT
; ORGANISM: Homo Sapien
US-10-176-758-252
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TYPE: PRT

CRGANISM: Homo Sapien

US-10-175-737-252
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APPLICANT: Chen, Jian
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Ten, James
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: APPLICANT: Scann
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
TITLE OF INVENTION NUMBER: US/10/176,758
CURRENT APPLICATION NUMBER: US/10/176,758
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             APPLICANT: Pan,James
APPLICANT: Matanab,Colin K.
APPLICANT: Watanab,Colin K.
APPLICANT: Watanab,Colin K.
APPLICANT: Watanab,Colin K.
APPLICANT: Watanab,Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: SECRETE ENCODING THE SAME
FILE REFERENCE: P3430R.C42
CURRENT APPLICATION NUMBER: US/10/174,590
CURRENT PILING DATE: 2002-06-18
Prior application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 252
LENGTH: 363
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Publication No. US20030008353A1
GENERAL INFORMATION:
APPLICANT: Baker Kevin P.
APPLICANT: Chen, Jian
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Gurney, Austin L.
                                                                                                                                                                                                                                                                            TYPE: PRT
CORGANISM: Homo Sapien
US-10-174-590-252
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APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gurney, Austin L.
APPLICANT: Pan, James
APPLICANT: Pan, James
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: APPLICANT: AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND CURRENT APPLICATION NUMBER: US/10/175, 737
CURRENT APPLICATION NUMBER: US/10/175, 737
CURRENT PILING DATE: 2002-06-19
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                                                                                                                            7 SSTAVNSCS--POSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQN
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                                                                   Gaps
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      DB 14; Length 363;
                                                                Indels
Ouery Match 37.9%; Score 1536; DB 14; Best Local Similarity 96.2%; Pred. No. 3.5e-79; Matches 308; Conservative 3; Mismatches 7;
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NUMBER OF SEQ ID NOS: 612
SEQ ID NO 252
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FILING DATE: 1998-05-15
APPLICATION NUMBER: 60/085580
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APPLICANT: WOOD, MILLIAM 1.
APPLICANT: WOOD, MILLIAM 1.
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME TITLE OF 19430RL41
CURRENT APPLICATION NUMBER: US/10/174,581
CURRENT FILING DATE: 2002-06-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-09-18
PRIOR FILING DATE: 1997-10-24
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SLSMTSAVQNSTYTTSVITSCELTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES 304
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                                                                                                        185 ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT 244
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APPLICATION NUMBER: 60/066120
FILING DATE: 1997-11-21
APPLICATION NUMBER: 60/066466
FILING DATE: 1997-11-24
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APPLICANT: Baker, Kevin P.
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APPLICATION NUMBER: 60/065311
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Smith, Victoria
Watanabe, Colin K.
Wood, William I.
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PRIOR APPLICATION NUMBER: 60/06572
PRIOR FILING DATE: 1997-11-24
PRIOR APPLICATION NUMBER: 60/069425
PRIOR FILING DATE: 1997-12-11
PRIOR PELING DATE: 1997-12-12
PRIOR PILING DATE: 1997-12-12
PRIOR APPLICATION NUMBER: 60/068017
PRIOR APPLICATION NUMBER: 60/07450
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PRIOR PILING DATE: 1997-12-18
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PRIOR PILING DATE: 1998-03-11
PRIOR APPLICATION NUMBER: 60/077649
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APPLICATION NUMBER: 60/084639
FILING DATE: 1998-05-07
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FILING DATE: 1998-05-07
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FILING DATE: 1998-04-29
APPLICATION NUMBER: 60/083559
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APPLICATION NUMBER: 60/084366
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APPLICATION NUMBER: 60/084414
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CURRENT APPLICATION NUMBER: US/10/176,483
CURRENT FILING DATE: 2002-06-20
FILE REPERENCE: PARTE: 2002-06-20
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 252
                                                                                                                                                                                                                         7 SSTAVNSCS--PQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQN
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                                                                       Length 363;
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                                                                                                                                                      Indels
                                                                       DB 14;
                                                                   Query Match 37.9%; Score 1536; DB 14 Best Local Similarity 96.2%; Pred. No. 3.5e-79; Matches 308; Conservative 3; Mismatches 7
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Publication No. US20030017541A1
GENERAL INFORMATION:
PRIOR APPLICATION NUMBER: 60/089653
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Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
Pan, James
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Wood, William I.
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TYPE: PRT
ORGANISM: Homo Sapien
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Best Local Similarity
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Pan, James
Smith, Victoria
Watanabe, Colin K.
                                                                               APPLICANT: Baker, Kevin P. APPLICANT: Chen, Jian
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CORGANISM: Homo Sapien
US-10-176-914-252
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US-10-176-915-252
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APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Graney, Austin L.
APPLICANT: Graney, Austin L.
APPLICANT: Matenabe, Colin K.
APPLICANT: Matenabe, Colin K.
APPLICANT: Matenabe, Colin K.
APPLICANT: Shang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C7
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C7
CURRENT FILING DATE: 2002-06-20
CURRENT FILING DATE: 2002-06-20
CURRENT FILING DATE: 2002-06-20
MURBER OF SEQ ID NOS: 612
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           65 STSHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVTVPPPGLE 124
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                                                                                                                    249 SLSMTSAVQNSTYTTSVITSCITSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES 308
244
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                                           185 ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT
                                                                                                    SLSMTSAVQNSTYTTBVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES
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Best Local Similarity 96.2%; Pred. No. 3.5e-79;
Matches 308; Conservative 3; Mismatches 7; Indels 2;
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||||||||||||||||||||||||||||||||||309 APGTIMNGHGGGRSQQTLDS 328
                                                                                                                                                                                                                                                           ; Sequence 252, Application US/10176749; Publication No. US20030017542A1; GENERAL INFORMATION:
                                                                                                                                                                                APGTIMNGHGGGRSQQTLDT 324
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CORGANISM: Homo Sapien
US-10-176-749-252
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APPLICANT: Chen, Jian
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APPLICANT: Goddard, Audrey,
APPLICANT: Goddard, Audrey,
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Smith, Victoria
APPLICANT: Matanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Smith, Victoria
APPLICANT: Sharia, Zemin
ITILE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
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37.9%; Score 1536; DB 14; Length 363;
Best Local Similarity 96.2%; Pred. No. 3.5e-79;
Matches 308; Conservative 3; Mismatches 7; Indels 2
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Sequence 252, Application US/10176914
Publication No. US20030017543A1
GENERAL INFORMATION:
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Godowski, Paul J.
Gurney, Austin L.
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APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Wacamabe, Colin K.
APPLICANT: Wacamabe, Colin K.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R1C45
CURRENT PPLICATION NUMBER: US/10/175, 738
CURRENT FILING DATE: 2002-06-19
Prior application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 612
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             DB 14; Length 363;
           37.9%; Score 1536; DB 14;
96.2%; Pred. No. 3.5e-79;
iive 3; Mismatches 7;
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5. US20030022294A1
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Goddard, Audrey
Godowski, Paul J.
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                                  Best Local Similarity 96.2
Matches 308; Conservative
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Matches 308; Conserv
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Publication No. US2(
GENERAL INFORMATION)
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APPLICANT: Goddard, Paul J.
APPLICANT: Goddwki, Paul J.
APPLICANT: Goddwki, Paul J.
APPLICANT: Goddwki, Paul J.
APPLICANT: Smith, Victoria
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Wood, William I.
APPLICANT: APPLICANT: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC TITLE OF INVENTION: ACIDS ENCODING THE SAME FITLE OF INVENTION: ACIDS ENCODING THE SAME FILE REFERENCE: P3430R1C7
CURRENT APPLICATION NUMBER: US/10/173,706
CURRENT FILING DATE: 2002-06-17
APPLICANT: Wood, William I.
APPLICANT: Zhang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R.C110
CURRENT APPLICATION NUMBER: US/10/176,915
CURRENT APPLICATION NUMBER: US/10/176,915
PTIOT Application removed - See File Wrapper or Palm
NUMBER OF SEQ ID NOS: 612
SEQ ID NO 252
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NUMBER OF SEQ ID NOS: 612
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Pred. No. 3.5e-79;
3; Mismatches 7
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Best Local Similarity 96.2
Matches 308; Conservative
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                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Homo Sapien
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; ORGANISM: Homo Sapien
US-10-173-706-252
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APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Desnoyers. Luc
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J.
APPLICANT: Gordowski, Paul J.
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Matanabe, Colin K.
APPLICANT: Matanabe, Colin K.
APPLICANT: APPLICANT: Anang, Zemin
APPLICANT: APPLICANT: ACIDS ENCODING THE SAME
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REFERENCE: P3430R.C60
CURRENT FILIATIO DATE: 2002-66-19
FILE REFERENCE: P3430R.C60
CURRENT FILIATIO DATE: 2002-66-19
FILE APPLICATION NUMBER: US/10/175,752
CURRENT FILIATIO DATE: 2002-66-19
FILE APPLICATION NUMBER: OS: 612
SEQ ID NOS: 612
SEQ ID NOS: 612
LENGTH: APPLICATION TEMOVED
SEQ ID NOS: 612
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                                   248
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185 ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNT
                   SLSMTSAVQNSTYTTSVITTSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES
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                                                                                                                                                                                                                                                   ; Sequence 252, Application US/10175752; Publication No. US20030022295A1; GENERAL INFORMATION:
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Best Local Similarity 96.2%
Matches 308; Conservative
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CRGANISM: Homo Sapien
US-10-175-752-252
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US-10-175-752-252
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RESULT 14

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APPLICANT: BAKET,Kevin P.
APPLICANT: Chen, Jian
APPLICANT: Chen, Jian
APPLICANT: Deenoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Goddard, Audrey
APPLICANT: Gurney, Austin L.
APPLICANT: Gurney, Austin L.
APPLICANT: Matanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Watanabe, Colin K.
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Matanabe, Colin K.
APPLICANT: Alang, Zemin
TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REPERRNCE: P34430RLCT
TITLE OF INVENTION: ACIDS ENCODING THE SAME
FILE REPERRNCE: P3430RLCT
CURRENT APPLICATION NUMBER: US/10/176,482
CURRENT FILING DATE: 2002-06-20
CURRENT FILING DATE: 2002-06-20
PRIOR APPLICATION TEMOYED SEQ ID NOS: 612
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; Sequence 252, Application US/10176482; Publication No. US20030022296A1; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               305 APGTIMNGHGGGRSOOTLDT 324
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Watanabe, Colin K.
Wood, William I.
Zhang, Zemin
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Goddard, Audrey
Godowski, Paul J.
Gurney, Austin L.
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APPLICANT: Chen, Jian
APPLICANT: Desnoyers, Luc
APPLICANT: Goddard, Audrey
APPLICANT: Godowski, Paul J
APPLICANT: Gotowski, Paul J
APPLICANT: Gurney, Austin L
APPLICANT: Smith, Victoria
APPLICANT: Watanbe, Colin
APPLICANT: Smith, Victoria
APPLICANT: Smith, Victoria
APPLICANT: Santh, Sociin
APPLICANT: Zhang, Zemin
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 37.9
Best Local Similarity 96.2
Matches 308; Conservative
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ORGANISM: Homo Sapien
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US-10-176-757-252
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65 STSHPTTTTSWDLKPPTSQSSVLSHLDPKSQPEPSPVLSQLSQRQQHOSQAVTVPPPGLE 124
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                                                                                                                                                                                                                                                                                                                                           TITLE OF INVENTION: SECRETED AND TRANSMEMBRANE POLYPEPTIDES AND NUCLEIC PILE REPERENCE: PA340RDLC86
CURRENT APPLICATION NUMBER: US/10/176,757
CURRENT APPLICATION NUMBER: US/20/176,757
Prior Application removed - See File Wrapper or Palm NUMBER OF SEQ ID NOS: 612
SEQ ID NO 252
LENGTH: 363
                                                                                                                                                                                                                                                                                                                  7 SSTAVNSCS--PQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQN
                                                                                                                                                                                                                                                                                     Gaps
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CORGANISM: Homo Sapien
US-10-176-757-252
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Search completed: January 31, 2005, 17:49:12 Job time : 74 secs

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- protein search, using sw model OM protein

Run on:

January 31, 2005, 17:38:56; Search time 22 Seconds (without alignments) 3437.563 Million cell updates/sec

US-10-509-307-1 4055

score: Title: Perfect sc Sequence:

1 MAPGIGSSTAVNSCSPQSLS......LQPKSQASKPAYGNSPYWIN 786

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

283416 segs, 96216763 residues Searched: Total number of hits satisfying chosen parameters:

283416

seq length: 0 seq length: 2000000000 0B Minimum | Maximum |

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Database

PIR 79:\*
1: pir1:\*
2: pir2:\*
3: pir3:\*
4: pir4:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

	Description	hypothetical prote	lpha-	HKR1 protein precu	gastric mucin (clo	hypothetical prote	ш	serine-rich protei	MSB2 protein - yea	probable transform	hypothetical prote	hypothetical prote	ascites sialoglyco	nuclear envelope p	hypothetical prote	cell wall surface	hypothetical prote	nascent polypeptid	hypothetical prote	eyelid - fruit fly	hypothetical serin	lipoprotein vsaC [	hypothetical prote	_	hypothetical prote	_	_		_	ă
SUMMARIES		4	80	9	1	3	0	3	0	80	3	6	7	0	6	9		9	3	6	4	7	-	4	7	6	4	2	7	6
S	a	T3443	S4847	86970	14714	T3443	859310	T39903	825370	826058	F90073	T1650	A53577	A40670	T33369	E95206	D86731	T30826	T34513	T13049	T37544	E90577	867571	T4114	H96597	T3436	T4881	T4502	S6685;	T0309
	80	~	Н	~	N	7	7	~	~	~	N	~	~	~	~	~	7	~	æ	~	~	~	~	~	N	7	~	7	~	7
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d	Query	9.3	8.9	8.0	7.9	7.8	7.4	7.2	7.1	7.1	6.9	6.8	6.8	6.9	6.8	6.7	6.7	6.7	6.7	9.9	9.9	6.5	6.4	6.4	6.4	6.4	•	6.3	6.2	6.2
	Score	378.5	360	323	321	314.5	299.5	291.5	289.5	286.5	280	277	276.5	274.5	274	272.5	272	270.5	270	268.5	267	262.5	261.5	260.5	258.5	257.5	257.5	254.5	252.5	252
	Result No.	-	~	e	4	Ŋ	9	7	80	o	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	53

probable membrane	hypothetical prote	probable nuclear p	hypothetical prote	probable membrane	mucin 4, tracheal	hypothetical prote	AF17 protein - hum	mucin 1 precursor,	hypothetical prote	agglutinin-like ad	proteophosphoqlyca	membrane glycoprot	exo-alpha-sialidas	peroxigome prolife	nucleoporin - rat
857180	T47182	S62562	T49726	S56032	PN0012	T40290	138533	A35175	T11678	T30531	T46707	T45463	JH0557	T02885	A44345
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1161	1299	1159	1198	881	610	963	1093	1344	948	1419	383	867	1162	1560	1468
6.2	6.2	6.2	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.1	6.0	0.9	0.9	6.0	6.0
251.5	251.5	250.5	250.5	250	249.5	248.5	248.5	248.5	248	248	244.5	243.5	243.5	243	241.5
30	31	32	33	34	32	36	37	38	39	40	41	42	43	44	45

## ALIGNMENTS

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	Caenorhabditis	-
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	K06A9.1a	
	protein	<b>John Chap</b>
34	othetical protein	portos. Casanorhabditis elegans

RESULT 1

hypothetical protein K06A9.1a - Caenornabdalīs elegams C;Species: Caenorhabditis elegams C;Date: 29-Oct-1999 #sequence\_revision 29-Oct-1999 #text\_change 09-Jul-2004

C, Accession: T34434 R, Geisel, C.; Gattung, S. submitted to the EMBL Data Library, December 1996 A, Description: The sequence of C. elegans cosmid K06A9. A, Reference number: Z21525

A,Accession: T34434
A,Status: preliminary; translated from GB/EMBL/DDBJ
A,Aolecule type: DNA
A,Molecule type: DNA
A,Residues: 1-223 <GEI>
A,Cross-references: UNIPROT:Q8IFX6; EMBL:U80846; PIDN:AAC70890.1; GSPDB:GN00028; CESP:K0
A,Experimental source: strain Bristol N2; clone K06A9

AjGene: CESP:K06A9.1a A;Map poaltion: X A;Introns: 38/1; 75/3; 103/3; 132/2; 158/2; \$22/1; 1088/1; 1367/1; 2039/1; 2049/1; 2075/ 33; Gaps Query Match 9.3%; Score 378.5; DB 2; Length 2232; Best Local Similarity 22.6%; Pred. No. 7.5e-10; Matches 216; Conservative 103; Mismatches 330; Indels 305;

886 SPGSPGTILISISPSPSQSTIIGSTQGSTSPG--ISTISEEMTSQGSTQTPGSTGTVTQ 943 59 PSTQQNST----SHPTTTTSWDLKPPTSQSSVLSHLDPKSQPEPSPVLSQ 104 28 2 APGTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITSSQILDQ--LKAP-SLGQFTTT g ઠે ò

a

1004 TSGATSSSGSPGTTLTSISPSPSSTIGSSQGSTSPVVSTISQGSTETPGSTGSTVTK- 1062 147 105 LSQRQQHQSQAVTV-----PPPGLESFPSQAKL------RESTPGDSPSTVNKL 셤 ઠે

148 LQLPSTTIENISV-----SVHQPQPKHIKLAKRRIPPASKIPASAVEM 190 ò

1063 ---PSTVSGSASSGSTATMGSTEASSTSGGSSTSPNPSQ-----STSPSTSGATSS 1110 191 PGSADVTGLNVQ-----FGALEFGSEPSLSEFGSAPSSENSNQIPIS----g ò

1111 PGSSGTTLTSISPSPSQSSTIGSSQGSTSPVVSTTSGDMTSQGSTQIPGSTGSTVTQPST 1170 ----LYSKSLSEPLNTSLSMTSAVQNSTY---233 용 ઠે

셤 8 pseudohyr

for

34;

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A,Map position: 9R
C;Superfamily: yeast glucan 1,4-alpha-glucosidase homolog; glucan 1,4-alpha-glucosidase }|
C;Superfamily: yeast glucan 1,4-alpha-glucosidase degradation; transmembrane protein
K;Seywords: glycosidase; hydrolase; polysaccharide degradation; transmembrane #status predicted <TMl>
F;5-21/Domain: transmembrane #status predicted <TMl>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           606 KQHGVNLST-----PTP-----PFQCASGYGQHGYSTGYDDLTQGTAA 643
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SAPVISSITESS-----SAPVIS-----STTESSAPVISSITESSAPVISSITESSAA 456
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ------GTTVTPSSSKYPGSQTETSVSSTTE-----TTIVPTKTTT-----SVTTP
proc. Natl. Acad. Sci. U.S.A. 93, 8419-8424, 1996
A,Title: Mucl, a mucin-like protein that is regulated by Mssl0, is critical
A,Reference number: JC6123; MUID:96323237; PMID:8710886
A,Accession: JC6123
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSLPSTTSCT----ALLPSTSQHTGDLTSSPLSQLSSSLSSHQSSLSAHAALSSSTSHTH
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              684 TSSTTESSSAPVTSSTTESSSAPVPTPSSSAP----VPT-PSSSTTESSSAPVPT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   553 PQQSQSQTHHTAQQPFVNPALPPGXSY-----TGLPYYTGMBSAFQYGPTMFVPPASA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              PTPSSSTTESS-----VAPVPTPSSSSNITSSAPSSTPFSSSTESSSVPVPTPSSSTTES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SSSYDQSSVHNRIPYQSPVSS---SESAPGTIMNGHGGGRSQQTLDTPKTTGPPSALPSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       517 STITESSSA----PAPTPSSTITESSAPVT-----SSTITESSAPVPT-PSSSTITES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      394 ASVESASSHQSSATFSTAATSVSSSASGVSLSSSMNTANSLCLGGTPASASSSSSRA--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              -----APLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYPIYGYDELQMLQSRL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        PVDYYGIPFAAPTALASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQ------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  297 KKKTITISKİCİKKTITIPVPİPSSSI----TESSSAPVPİPSSSITESSSAPVTSSITESSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   116 VTVPPPGLESFPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEP---SLSEFGSAP---SSENSNQI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PISLYSKSLSE----PLNTSLSMTSA--VQNSTYTTSVITSCSLTSSSLNSAS---PVAM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        QONSTSHPITITSWDLKPPISQSSVLSHLDFKSQPEPSPVLSQLSO-----RQQHQSQA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            354 APVPTPSSSTTES----SAPVTSSTTESSSAPVTSSTTESSSAPV--PTPSSSTTESS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            258 APATPTTT---SCTKE-----KPTPPTTTSCTKEK-----PTPPHHDTTPCT
                                                                                             A;Status: nucleic acid sequence not shown
A;Molecule type: DNA
A;Residues: 1-1367 <LAM>
A;Residues: 1-1367 <LAM>
A;Cross-references: GB:U30626; NID:g1304386; PIDN:AAC49609.1; PID:g1304387
A;Cross-references: AB:U30626; NID:g1304386; PIDN:AAC49609.1; PID:g1304387
A;Genetics:
A;Genetics: A;Genetics: MPS:YIR019c; SGD:S0001458
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             2 APGIGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANIISSQILDQLKAPSLGQFTITPST
                                                                                                                                                                                                                                                                                                                                                                                                                                                      Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                    Query Match
Best Local Similarity 24.7%; Pred. No. 3e-09;
Matches 201; Conservative 103; Mismatches 328; Indels 182;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          SSAPVSSSTTESSVAPVPTPSSSSNITSSAPSSIPFSSTT----ESFST-
                                                                                                                                                                                                                                                                                                                                                                                                          DB 1; Length 1367;
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Pred. No. 3e-09;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SAFQYGPTMFVPPASAKQHGVNLSTPTPPFQQASGYGQHGYSTGYDDL--1QGTAAGD-- 645
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                                                 -TGPP--SAL 334
                                                                                                                                                                                  PISSPIPSTIFASSTSGSTISDVSSVSTTSLAPLSSSLPSTVPSSTQSFSSTSEGSSKAS
                                                                                                                                                                                                                                   SSPL-SQLSSS----LSSHQSSLSAHAALSSSTSHTHASVESASSHQSSATFSTAAT-SV
                                                                                                                                                                                                                                                                                                                              SSSASSGVSLSSSMNTANSLCLGGTPASASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQ
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                                                                                                                                           STSOHTGDLT
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                                                          ---MNGHGGGRSQQTLDT----PKT
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A;Status: preliminary: translated from GB/EMBL/DDBJ
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Rolecule type: mRNA
A;Cross-references: UNIPROT:028071; EMBL:U10281; NID:9915205; PIDN:AAC48526.1; PID:99152
B;Turner, B.S.; Bhaskar, K.R.; Hadzopoulou-Cladaras, M.; Specian, R.D.; LaMont, J.T.
B;Jochem. J. 308, 89-96, 1995
A;Title: Isolation and characterization of CDNA clones encoding pig gastric mucin.
A;Reference number: S55315; MUID:95275264; PMID:7755593
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             gastric mucin (clone PGM-2A) - pig (fragment)
C.Species: Sus scrofa domestica (domestic pig)
C.Species: Sus scrofa domestica (domestic pig)
C.Accession: 147141, SS5315
R;Turner, B.S.; Bhaskar, K.R.; Hadzopoulou-Cladaras, M.; Specian, R.D.; LaMont, J.T.
Agstroenterology 106, 200, 1994
A;Title: Pig gastric mucin: isolation and characterization of a CDNA clone with a novel A;Reference number: 147141; MUID:94102478; PMID:7506218
  426 YSSP--SLSASVSSHFGVAPPPSAYISFSSVPVAVSSTYTSSPSASVVVPSAYASSPSVP 483
                                                                                        464
                                                                                                                                             484 VÄVSSTYTSSPSAPAAISSTYTSSPS-----APVAVSSTYTSSPSAPAAISSTYTSSPSA 538
                                                                                                                                                                                                  PQGVPPLLHNQYLVGPGGLLPAYPIYGYDELQMLQSRLPVDYYGIPFAAPTALASRDRSL 524
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                                                                                                                                                                                                                                                                                                                  525 ANNPYPGDVTKFGRGDSASPAPA-----TTPAQPQOSQSQTHHTAQQPFV----N
                                                                                                                                                                                                                                                                                                                                                      : | : | : | | : | 152 PSVP----VAVSSTYTSSPSAPAAISSTYTSSPSAPAAISSTYTSS
                                                                                        410 TAATSV-SSSASSGVSLSSSMNTANSLCLGGTPASASS--SSSRAAPLVTSG--KAPPNL
                                                                                                                                                                                                                                                          PVAV----SSTYTSSPSA--PAAISSTYTSSPSAPVAVSSTYTSSP-SAPVAISSTYTSS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    648 PSVPVAVSST----YISSPSAPAAISSTYTSSPSVPVAVSSTY----TSSPSAPAAISSTY
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                                                                                                                                                                                                                                                                                                                                                                                                                                  571 PALPPGYSYTGLPYYTGMPSA----FQYGPTMFVPPASAKQHGVNLSTPTPPFQQASGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          PPFLHILPAHQQPHSQLLHHHLPQD---AQSGSGQRSQPSSLQ--PKSQASKPAYGNSPY
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A;Cross-references: GB:U10281; NID:g915205; PIDN:AAC48526.1; PID:g915208
C;Superfamily: pig submaxillary mucin
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                683 TGSVYNKTQTFDKQGFHAGTPPPFSLPS---VLGSTGPLA--
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A,Status: preliminary
A,Molecule type: mRNA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SDTMSSVKKSTEIATPS--SSIV------PTPLQSYSDESQISQILSHNPKSVAES 149
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            120 PPGLESFPSQAKLRESTPGDS--PSTVNKLLQLPS-----TTIENISVSVHQPQPKHI 170
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  150 DSDTTSSESSSSVIISTSDSSAVPREISPIITTDSQISKEEGTLAQTSSIS---ETTRI 205
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      361 TSSPLSQLSSSLSSH-----QSSLSAHAALSSS-TSHTHASVESASSHQSSATFS 409
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8.0%; Score 323; DB 2; Length 1802;
Best Local Similarity 23.0%; Pred. No. 2.1e-07;
Matches 208; Conservative 124; Mismatches 361; Indels 210; Gaps
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PPFSLPSVLGSTGPLASG-AAPGYAPPFLHILP
                                STTITTTVCSTGTNSAGETTSGCSPKTVTTTVP
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513 APTALASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPQOSOSOTHHTAQQPFVNPA 572
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        630 YSTGYDDLTQGTAAGDYSKGGYAGSSQ---APNKSAGSG------PGKGVSVSSST 676
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                334 LPSVSSLPSTISCTALLPSTSQHTGDLTSSPLSQLSSSLSSHQSSLSAHAALSSSTSHTH 393
                                                                                                                                    GLESFPSOAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPP-- 179
                                                                                     274 LSSSTIQSSSGTF-----PSSVASSPSTVGSTSGAASSSSYATVSTIAGSTGSTIT-PVP 327
                                                                                                                                                                                                                                                                ---SPSAAS-STTPVV 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     probable membrane protein YMR317w - yeast (Saccharomyces cerevisiae)
NyAlternate names: hypothetical protein YM9924.09
C;Species: Saccharomyces cerevisiae
C;Species: Saccharomyces cerevisiae
C;Accession: S59310
B;Churcher, C.M.
submitted to the EMBL Data Library, September 1995
A;Reference number: S59302
A;Reference number: S59302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          534 SPNPSSSPASTGSTITISGSSSIIVSTVSG--STVSGSTGTSQSTLASSTATPGSSS---
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              SGATTSSGSAGTTMTSPSQSSSVGSSQGSTSPAASTTSGEMTSQGSTQTPGSSVSTSAAI
                                                                                                                                                                                                                                                                                                                                                                                                                                                   394 ASVESASSHQSSATFSTAAT-SVSSSASSGVSLSSSMNTANSLCLGGTPASASSSSRAA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             PLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYPIYGYDELQMLQSRLPVDYYGIPFA
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                                                                                                                                                                                                                                                                                                                                                           422 TVAPVSSSTFGGSTPIASSSSGGTVTVVSGSSGTYGSS---TPSASSSAGTASTISGS
                                                                                                                                                                                                                                                                                                                                                                                                                      SSY-----DOSSVHNRIPYQSPVSSSESAPGTIMNGHGGGRSQQTLDTPKTTGP-PSA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            677 TGLPDMTGSVYNKTQTFDKQGFHAGTPPPFSLPSVLGSTGPLASGA--APGYAPPP 730
                                            QQNSTSHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVTVPPP
                                                                                                                                                                                                                                 180 ---ASKIPASAVEMPGSADVT---GLNVQFGALEFGSEPSLSEFGSAPSSENSNQ----
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A,Reaidues: 1-1104 <CHU>
A,Cross-references: EMBL:Z54141; GSPDB:GN00013; MIPS:YMR317w
A,Experimental source: strain AB972
  224 TSPSTAVT--SPSSLGTSSSPLPSSISTSALPIASSSASS--
                                                                                                                                                                        G----SSSTIGSSTPSASSSSGTMSTISGSTGSTVTV--
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Pred. No. 1.4e-06;
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A,Cross-references: SGD:S0004936
A,Map position: 13R
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Best Local Similarity
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C;Species: Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 29-Oct-1999 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004
C;Accession: T34433
R;Geisel, C:; Gattung, S.
Submitted to the EMBL Data Library, December 1996
A;Description: The sequence of C: elegans cosmid K06A9.
A;Reference number: Z21525
A;Reference number: Z21525
A;Retus: preliminary, translated from GB/EMBL/DDBJ
A;Retus: preliminary, translated from GB/EMBL/DDBJ
A;Retus: preliminary
A;Molecule type: DNA
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                                                               244
                                                                                                                                                                        151 SSSSSPPISSTVS----SSSSPPISS 192
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                                    SPPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRIPPASKIP 184
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                                                                                                                                                                                    323 BISSTISSSVSSEAPLATSSVVSS-----360
                                                                                                                                                                                                                           177 IPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIP---ISL 233
                                                                                                                                                                                                                                                                                                                                                                              SI---SLTASPLPSVWSDITSSEASSISSNLASSSAPSDNNSTIASASLIVTKTKNSVVS 579
                                                                                                                                                                                                                                                                                           234 YSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRI 293
                                                                                                                                                                                                                                                                                                                         416 ASSRLFSSKNTSVT----STLVATEASSVTSSLRPSSETLASNSIIESSLST-- 463
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        640 TPGFSTSSASLAINSTVVSSSLAG-----YSPSTPESSPTTSTLVTSEAPSTVSS 689
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           -----GTAAGDYSKGGYAGSSQAPN--KSAGSGPGKGV 670
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        509 IPFAAP-----TALASRDRSLANNPY-PGDVTKFGRGDSASPAPATTPAQ 552
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     553 POOSQSQ---THHTAQQPFVNPALP-PGYSYTGLPYYTGMPSAFQYGPTMFVPP---- 602
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     671 SVSSSTTGLPDMTGSVYNKTQTFDKQGFHAGTPP----PFSLPSVLGSTG--PLASGAA 723
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           918 KTSQETKKAKPGSETVRSSSSFVEK-----TSPTTKASPSTSPSESKAAGNTSVATNAS 971
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                                                                                                               SATSSSVSSEASSTSSSVSSEAPLATSSVVSS--EAPSSTSSVVSSEAPSSTSSSVSS
                                                                                                                                                                                                                                                  --PSSTSSSVSSEAPSS---TSSSVSSEISSTKSSVMSSEVSSATSSLVSSEAPSALSSL
                                GTGS--STAVNSCSPOSLSSVLGSGFGELAPPKMANIT----SSQILDQLKAPSLGQFT
     Gaps
Conservative 126; Mismatches 342; Indels 225;
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T39903

serine-rich protein - fission yeast (Schizosaccharomyces pombe)

serine-rich protein - fission yeast (Schizosaccharomyces pombe
C;Species: Schizosaccharomyces pombe
C;Bate: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
C;Accession: T39903

R;Lyne, M.; Rajandream, M.A.; Barrell, B.G.; Rieger, M.

submitted to the EMBL Data Library, November 1998
A;Reference number: Z21889
A;Accession: T39903
RESULT 7
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A Molecule type: DNA
A;Residues: 1-534 <LYN>
A;Residues: 1-534 <LYN>
A;Cross-references: UNIPROT:094317; EMBL:AL033534; PIDN:CAA22127.1; GSPDB:GN00067; SPDB:A;Experimental source: strain 972h-; cosmid c215
C;Genetics:
A;Gene: SPDB:SPBC215.13
A;Gene: SPDB:SPBC215.13
A;Map position: 2
C;Superfamily: pig submaxillary mucin
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                                                                                                                                                                                                                   Pred. No. 1.4e-06;
A;Status: preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                              Score 291.5;
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C'Species: Saccharomyces cerevisiae
C'Bate: 17-Apr-1993 #sequence\_revision 17-Apr-1993 #text\_change 09-Jul-2004
C'Accession: S25370; 864305
R'Bender, A.; Pringle, J.R.
Yeast B, 31-332, 1992
A;Title: A Ser/Thr-rich multicopy suppressor of a cdc24 bud emergence defect A;Title: A Ser/Thr-rich multicopy suppressor of a cdc24 bud emergence defect A;Reference number: S25370; MUID:92383951; PMID:1514328 N;Alternate names: protein G4017; protein YGR014w protein - yeast (Saccharomyces cerevisiae)

emergence defect

A;Cross-references: UNIPROT:P32334; GB:M77354; NID:g171993; PIDN:AAA34798.1; PID:g171994 KRiager, M.; Muellar-Auer, S.; Brueckner, M.; Schaefer, M. submitted to the Protein Sequence Database, May 1996 A;Reference number: S64071 A; Molecule type: DNA A; Residues: 1-1306 <BEN> A; Accession: S25370

À;Molecule type: DNA A;Residues: 1-1306 «RIE» A;Cross-references: EMBL:272799; NID:g1322977; PID:g1322978; MIPS:YGR014w A;Experimental source: strain S288C

A; Accession: S64305

A;Cross-references: SGD:S0003246; MIPS:YGR014w A; Gene: SGD: MSB2

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A;Map position: 7R
C;Superfamily: yeast glucan 1,4-alpha-glucosidase homolog; glucan 1,4-alpha-glucosidase
C;Superdamily: yeast glucan brotein
E;3-19/Domain: transmembrane #status predicted <TM1>
F;1189-1205/Domain: transmembrane #status predicted <TM2>
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                                                                                                                                                                                                                             PEPSPVLSQLSQRQQHQSQAVTVPPPGLESFPSQAKLRESTPGDSPSTVNKLLQLP--ST 153
                                                                                                                                                                                                                                                                                                STSN-SFSIVSPS------VSFVPSQSSSDVASSSTANVVSSSFSDIPPQTST 396
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HAGTPPPFSLPSVLGSTGPLASGAAPGYAPPPFLHILPAHQQPHSQLL----HHHLPQDA
                                                                                                                                                                                                                                                                                                                                                                                                    512 SFSYTSLQAGGSSMINPSSSTIVXSSSTGSSEESAASTASATLSGSSSTYMAGNLQSQPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SQLSSSLSSHQSSLSAHAALSSSTSHT-----HASVE-----SASSHQSSATFS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         S--TSSLLSESQATSTSAVLASSSVSTTSPYTTAGGASTEASSLISSTSAETSQVSYSQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       467 GVPPLLHNQYLVGPGGLLP-----AYPIYGYDELQMLOSRLPVDYYGIPFAAPTALAS
                                                                                                                                                                                                                                                                                TIENISVSVHOPOPKHIKLAKRIPPASKIPA-SAVEMPGSADVTGLNVOFGAL----E
                                                                                                                                                                                                                                                                                                                                 PGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSL
                                                                                                                                            GOFTTT-----PSTQQNSTSHPTTT-TSWDLKP-PTSQSS------VLSHLDFKSQ
                                                                                                                                                                                                    235 ADPSSSSBILVQSSADPSSPPSPTTTDISLSAAPLQTSESSSFTTASAALPVSSTDVDGS
                                                                                                                                                                                                                                              -SASPVVS-MSAAGQIASSSSTDNPTMSETFSLTS--TEVDGSDVSSTVSALLSAPFLQT
                                                                                                                            2 APGTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANIT---SSQILDQ-----LKAPSL
                                                                                                    Gaps
                                                                        Query Match 7.1%; Score 289.5; DB 2; Length 1306; Best Local Similarity 24.0%; Pred. No. 5e-06; Matches 211; Conservative 110; Mismatches 365; Indels 193;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                SVSQVSDTP----VSYTTSSSSVSQVSDTPVSYTTSSSSVSQVSDTP--
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RESULT 9 S26058

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probable transforming protein (can) - human
C; Species: Homo sapiens (man)
C; Species: Homo sapiens (man)
C; Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C; Accession: S2608
R; Von Lindern, M.; Fornerod, M.; Van Baal, S.; Jaegle, M.; de Wit, T.; Buijs, A.; Grosvelle, Cell. Biol. 12, 1687-1697, 1992
A; Title: The translocation (6;9), associated with a specific subtype of acute myeloid leveran mRNA
A; Reference number: S26058; MUID:92195315; PMID:1549122
A; Accession: S26058
A; Status: preliminary
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Molecule type: mRNA
A; Mesidues: 1-2090 «VON»
A; Residues: 1-2090 «VON»
A; Cross-references: UNIPROT:P35658; EMBL:X64228; NID:929652; PIDN:CAA45535.1; PID:929653
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       588
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A-----SKIPASAVEMPGS--ADVTGLNVQFGAL----EFGSEPSLSEFGSAPSSEN 225
                                                                                                                                                                                                                                                                                                                                                                                                                                                    83 QSSVL-----SHLDFKSQP-----EPSPVLSQLSQRQQHQSQAVT--VPPPGL 123
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  YPGDVŢKFGRGDSASPAPATTPAQPQQQQQQTHHTAQQPFVNPALPPGYSYTGLPYYTGM
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       QASGYG------QHGYSTGYDDLTQGTAAGDYSKG--GYAGSSQAPNKSAGSG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         475 QYLVGPGGIL-----PAYPI-YGYDELQMLQSRLPVDYYGIPFAAPTALASRDRSLANNP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      QAPPQT----SDSVKKEPVL--AQPAVSNSGTAASSTSLV-----ALSAEATPATTGV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  PGKGVSVSSSTTGLPDWTGSVYNKTQTFDKQGFHAGTPPPF--SLPSVLGST------
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          278 VAMSSSYDQSSVHNRIPYQSPVSSSESAPGTIMNGHGGGRSQQTLDTPKTTGPPSALPSV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               .253 DAFSSGGGSKPSYEAIPESSPPSGITSASNT------TPGEPAA---S
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              E-SFPSQ---AKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SNOIPISLYSK----SLSEPLNTSLSMTS---AVONSTYTTSVITSCSLTSSSLNSASP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  --SSSTS------TATHASVESASSHQSSATFSTAATSVSS
                                                                                                                                                                                                                                                                                                                                                                         36 ANITSSQILDQLKAPSLGQFTTTPSTQQNSTSHPTTTTSWD-------LKPPTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSLPSTTSCTALLPSTSQHTGDLTSSPLSQLSSSLSSHQSSLSAHAAL------
                                                                                                                                                                                                                                                                                                                                       257;
                                                                                                                                                                                                                                                                                                  DB 2; Length 2090;
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                                                                                                                                                                                                                                                                                                Query Match 7.1%; Score 286.5; DB 2; Best Local Similarity 23.2%; Pred. No. 1.2e-05; Matches 215; Conservative 104; Mismatches 349;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          418
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us-10-509-307-1.rpr

qa	1690 TGSTASTAAATPQVSSSGFSSPARGTTAPGVFGQTTFGQASVF 1732		
ò	716 GPLASGAAPGYAPPPFLHILPAHQQPHSQLLHHHLPQDAQSGSGQRSQPSSLQPKS 771	1517 -	
ga d	GOSASSAASVFSFSOPGFSSV-PAFG		
දු දු	772QASKRAYGNSP 782 	Qy 648 KGGYAGSSQAPNKSAGSGPGKGVSVSSSTTGLPDMTGSVYNKTQTFDKQGFHAGTPPPFS 707	
RESULT F90073 hypothe C;Speci	RESULT 10 F90073 hypothetical protein SA2447 [imported] - Staphylococcus aureus (strain N315) C;Species: Staphylococcus aureus	Oy 708 LPSVLGSTGPLASGAAPG 725 :	
C; Date: C; Acces R; Kurod ma, A.; C.; Sh	C;Date: 10-May-2001 #sequence_revision 10-May-2001 #text_change 09-Jul-2004 A;Accession: F90073 B;Kuroda, M.; Ohta, T.; Uchiyama, I.; Baba, T.; Yuzawa, H.; Kobayashi, I.; Cui, L.; Oguc ma, A.; Mizutani-Ui, Y.; Kobayashi, N.; Sawano, T.; Inoue, R.; Kaito, C.; Sekimizu, K.; C.; Shiba, T.; Hattori, M.; Ogasawara, N.; Hayashi, H.; Hiramatsu, K.	RESULT 11 T16509 hypothetical protein F59A6.3 - Caenorhabditis elegans C;Species: Caenorhabditis elegans	
A; Refer A; Refer A; Acces	A;Title: Whole genome sequencing of meticillin-resistant Stapylococcus aureus. A;Reference number: A89758; MUID:21311952; PMID:11418146 A;Accession: F90073	C;Accession: T16509 R;Nhan, M. Submitted to the EMBL Data Library, December 1995	
A;Resid A;Cross	A; Molecule type: DNA A; Residues: 1-2271 <kur> A; Cross-references: UNIPROT: Q99QY4; GB:BA000018; PID:g13702612; PIDN:BAB43752.1; GSPDB:G</kur>	A;Reference number: 218526 A;Accession: T16509 A;Accession: T16509 A;Status: preliminary; translated from GB/EMBL/DDBJ	
A; Exper C;Genet A;Gene:	ics: SA2447	A, Molecule type: DNA A, Residues: 1-786 (ANHA) A, Cross-references: UNIPROT: Q21027; EMBL: U41994; NID: g1123047; PID: g1123052; PIDN: AAA834	A834
Query M Best Lo	Query Match 6.9%; Score 280; DB 2; Length 2271; Best Local Similarity 22.3%; Pred. No. 2.6e-05; Matches 166; Conservative 106; Mismatches 289; Indels 184; Gans 23;	C;Genetics: A;Gene: CBSP:F59A6.3 A;Introns: 106/1; 620/1; 634/3; 675/3; 775/1	
ठे ह	8 STAVNSCSPQSLSSVLGSGFGE-LAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQNST 66	Query Match 6.8%; Score 277; DB 2; Length 786; Best Local Similarity 22.1%; Pred. No. 1e-05; Matches 174; Conservative 90; Mismatches 299; Indels 226; Gaps 29;	
. & a	SHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQA 	QY 51 SLGQFTTTPSTQQNSTSHPTTTSWDLKPPTSQSSVLSHLDFKSQ 95 :	
3 &		Qy 96PEPSPVLSQLSQRQQHQSQAVTVPPPGLESFPSQAKLRESTP 137	
<del>ያ</del> ይ	1207 ASAFLSES-LSESTSESVSSSTSESTSLS 1238 176 RIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSFFGSAPSSEN-SNQIPISL- 233	138 GDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPPASKIPASAVEMPGSADVT	
음 음	1239DSTSESGSTSTSLSNSTSGSASISTSISESTSTFKSESVSTSLSMSTS 1288 234 YSKSLSEPLNTSLS-MTSAVONSTYTTSVITSCSITSSSINSAS-PVAMSSYDOSSVHN 291	DD 127 SDSTSTEPRISTTTDTKDTTTEDPVSSTDQSSTSPHETTRDTTTEGTTSEDST 179 Qy 198 GLNVQFGALEFGSEPS-LSEFGSAPSSENSNQIPISLYSKSLSEPLNT 244	
g 46	TSLSNSTSLSDSTSDSKSDSLSTSMSTSDSISTSKSDSISTSLSGSTSBSE	TESDETESTRSSETTSS	
Oy Dp	292 RIPYQSPVSSERSAPGTIMNGHGGGRSQQTLDTPKTTGPPSALPSVSSLPSTTSCTALLP 351	237 SSGNSETTESDGTTTTVFTTTKDDTSTVSGDSNSGSSTSEFKNTETTTGPGSTVSEPSSS	
ð f	352 STSOHTGDLISSPLSQLSSSLSSHQSSLSAHAALSSSTSHTHASVESASSHQSSATFSTA 411	Qy 280 MSSSYDQSSVHNRIPYQSPVSSESAPGTIMNGHGGGRSQQT 321	
3 &	ATS :	Qy 322 LDTPKTTGPPSALPSVSSLPSTTSCTALLPSTSQHTGDLTSSPLSQLSSSLSSHQS 377	
g &	1432 STSQSESTSTSTSLSDSTSISKSTSQSGSTSTSASLSGSESESDSQSISTSASESTSESA 1491 469 PPLLHNQYLVGPGGLLPAYPIYGYDELQMLQSRLPVDYYGIPFAAPTALASRDRSLANNP 528	Oy 378 SLSAHAALSSSTSHTHASVESASSHOSSATFSTAATSVSSASSGVS 424	
음 샹	- 5	425 LSSSMNTANSLCLGGTPASASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLL	

	602 839 648 896 703 754	RESULT 13 A40670  muclear envelope protein POM 121 - rat  muclear envelope protein POM 121 - rat  C;Species: Rattures norvegicus (Norway rat) C;Date: 03-May-1994 #text_change 09-Jul-2004 C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 09-Jul-2004 C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 09-Jul-2004 C;Date: 03-May-1994 #sequence_revision 03-May-1994 #text_change 09-Jul-2004 A;Hallberg, E.; Wozniak, R.W.; Blobel, G. A;Attis Date: 03-122, 513-521, 1993 A;Attis Date: 040670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number: A40670 A;Reference number:
485 PAYPIYGYDELQMLQSRLPVDYYGIPPAAPTALASRDRSLANNPYPGDVTKPGRGDSA 542  485 PAYPIYGYDELQMLQSRLPVDYYGIPPAAPTALASRDRSLANNPYPGDVTKPGRGDSA 542  509	RESULT 12 a535177 a55177 a55177 a55177 a55177 a55177 A55177 A55177 A55177 A55177 A55177 A55177 A55177 A55177 A55177 A55177 A571818163496 A5716181 Decliminary A5706181 A51577 A5706181 EVEDINARY A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5706181 A51577 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707 A5707	Ouery Match Best Local Similarity 20.9%; Pred. No. 2.6e-05; Matches 205; Conservative 115; Mismatches 362; Indels 301; Gaps 40; Matches 205; Conservative 115; Mismatches 362; Indels 301; Gaps 40;  Oy 137 TTTSHAPRESSSPPSTSVILTTTASTEGTSGDT 166  Db 137 TTTSHAPRESSSPPSTSVILTTTASTEGTSGDT 166  OY 67 SHPTTTSWDLKPPTSQSSVLSHLDFKSQPERSPVTTTASTEGTSGDT 166  OY 167 GHTMAVTTQGSTPATTEISVTPSTQKMSPVSTPSTSTGTTLLSQSRQQHOSQAVT 117  Db 167 GHTMAVTTGSTPATTEISVTPSTQKMSPVSTPSTTGTTLLSQSHTGMKKT 221  OY 118 VPPP

Gaps

486

540

64 NSTSHPTTTTSWDLKPPT----SQSSVLSHLDFKSQPEPSPVL----SQLSQRQQHQ 112

--STKPTIGTSMSSGPTTVAPGASTESTVLQ----SSTPSGTTVTLPSGSSTATAGTSPQ

GTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPSTQQ

SQAV-----TVPPPGLESFPSQAKLRESTP---GDSPSTVNKLLQLPSTTIENISVSV 162

113 541

ASTVITVIDISTVSGSTVISQTAESSLSTESPISAGSSISTVSTVSSQPSIXIP-----

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A;Map position: X
A;Introns: 42/1; 78/3; 106/3; 135/2; 161/2; 224/1
C;Superfamily: yeast glucan 1,4-alpha-glucosidase homolog; glucan 1,4-alpha-glucosidase
                                                                                Query Match 6.8%; Score 274; DB 2; Length 1275; Best Local Similarity 22.2%; Pred. No. 2.5e-05; Matches 170; Conservative 110; Mismatches 337; Indels 150;
               CESP: H02F09.3
  C; Genetica
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1016 ATTSGFGAAAATTQTTHSGSSSSLFGSSTPSPFTFG---GSAAPAGGGGFGLSATPGTGS 1072
                                                     AKRRIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQI--- 229
                                                                   LANNPYPGDVTKFGRGDSASPAPATTPAQPQGSOSQT-HHTAQQPFVNPALPPGYSYTGL 582
AVIVPPPGLESFPSQAKLRES--TPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKL 172
                                                                                                                                                            261 VITSCSLTSSSINSASPVAMSSSYDQSSVHNRIPYQSPVSSSESAPGTIMNGHGGGRSQQ 320
                                                                                                                                                                                                                 321 TLDTPKTTG----PPSALPSVSSLPSTTSCTA------LLPSTSQHTGDLTSS 363
                                                                                                                                                                                                                                  PLSQLSSSLSSHQSSLSAHAALSSSTSHT----HASVESASSHQSSATFSTAATSV-SSS 418
                                                                                                                                                                                                                                                                                                                           ASSGVSLSSSMNTANSLCLGGTPASAS-----SSSSRAAPLVTS-----GKAPPN 463
                                                                                                                                                                                                                                                                                                                                            464 LPQGVPPLLHNQYLVGPGGLLPAYPIYGYDELQMLQSRLPVDYYGIPFAAPTALASRDRS 523
                                                                                                                                                                                                                                                                                                                                                                                                 PYYTGMPSAFQYGPTMFVPPASAKQHGVNLSTPTPPFQQASGYGQHGYSTGYDDLTQGTA 642
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     -----FHAGTPPPFSLPSVLGSTGPLASG-----AAPGYAP 728
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       PPFLHILPAHQQPHSQLLHHHLPQDAQSGS-----GQRSQ-----PSSLQP-----KSQ 772
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               AGDYSKGGYAGSSQAPNKSAGSGPGK----GVSVSSSTTGLPDMTGSVYNKTQTFDKQG- 697
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     hypothetical protein H02F09.3 - Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Species: Caenorhabditis elegans C;Accession: T33369 #sequence_revision 29-Oct-1999 #text_change 09-Jul-2004 C;Accession: T33369 R;Geisel, C.; Harmon, G. submitted to the EMBL Data Library, July 1998 A;Description: The sequence of C. elegans cosmid H02F09.
                         454 KVTDPATG-----KQQSLWTSPPTPGSSGQRKRKIQLLPSRRGDQLTL----PPPPEL--
                                                                                                         ------BISLYSKSLSEPLNTSL------SMTSAVQNSTYTTS
                                                                                                                                 548 FTLTLPTVGPAASPASLPAPS-SNPLLESLKKMOESPAPSSSEPPEAATVAAPSPPKTPS
                                                                                                                                                                                                                                                                                                                                                                                                                                                    927 PTYPGANSQPTFGAT------DGATKPALAPSFGSSFTFGNSVAS-
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SLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSESAPGTIMNGHGG-GRSQQTLDTPKTTG 329

S--TGSTVSDSSTISDSTGSTNAPGSTESTVTGSSVSTVSGSTGPSTMSASTGSTNT

PPSALPSVSSLPSTTSCTALLPST----SQHTG--DLTSSPLSQLSSSLS---SHQS

330 756 378 816

GSTVTEASTISGSTESSTIPGSTES-TVSEASTVSGSSVSTVSGSTESTS--AGASTVSG

641

271 698

214

---LSEFGSAPSSENSNQIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSS

213 640

163 HQPQPKHIKLAKRRIPPASKI-----PASAVEMPGSADVTGLNVQFGALEFGSEPS---

755

377

815

437

874

438 GGTPASASSSS---SRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYPIYGYDE 494

SESSVSTVSSESTISQSTGSTTTGES------

SLSAHAALSSSTSHTHASVESASSHQSSATFSTAATSVSSSASSGVSLSSSMNTANSLCL

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STITEGSTISESTMTTVGVSTGSTITGESTVSGSTRSTVTGESTVSGSTESTVSGSTEST 1009
                                                       674
                                 PTPPPQQASGYGQHGYSTGYDDLTQGTAAGDYSKGGYAGSSQAPNKSAGSGPGKGVSVSS
                                                                                                                STICLPDMIGSVYNKTQIFDKQGFHAGIPPPFSLPSVLGSTGPLASG 721
   950
                                 615
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614

554

-----TVFGSTGSTATGSSTMSASTGSTDTPGSTESTITGSTVT-GESTVSGSTG 949

LQMLQSRLPVDYYGI PFAAPTALASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPO

495

901

555 QSQSQTHHTAQQPFVNPALPPGYSYTGLPYYTGMPSAFQYGPTMFVPPASAKQHGVNLST

E95206—
cell wall surface anchor family protein [imported] - Streptococcus pneumoniae (strain TI cell wall surface anchor family protein [imported] - Streptococcus pneumoniae
c;Species: Streptococcus pneumoniae
c;Species: Streptococcus pneumoniae
c;Date: 03-Aug-2001 #sequence\_revision 03-Aug-2001 #text\_change 09-Jul-2004
C;Accession: E95206
R;Tettelin, H.; Nelson, K.E.; Paulsen, I.T.; Eisen, J.A.; Read, T.D.; Peterson, S.; Heid
On, J.D.; Umayam, L.A.; White, O.; Salzberg, S.L.; Lewis, M.R.; Radune, D.; Holtzapple, nson, T.; Hickey, E.K.; Holt, I.E.
Science 293, 498-506, 2001

A;Accession: T33369
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Aclecule type: DNA
A;Medidues: 1-1275 <GBI>A;Cross-references: UNIPROT:O76602; EMBL:AF077538; PIDN:AAC64622.1; GSPDB:GN00028; CESP:A;Experimental source: strain Bristol N2; clone H02F09

us-10-509-307-1.rpr

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A;Authors: Loftus, B.J.; Yang, F.; Smith, H.O.; Venter, J.C.; Dougherty, B.A.; Morrison, A;Title: Complete Genome Sequence of a virulent isolate of Streptococcus pneumoniae. A;Reference number: A95000; MUID:21357209; PMID:11463916
A;Accession: E95206
A;Accession: E95206
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1.4776 <KUR>
A;Cross-references: UNIPROT:097P71; GB:AE005672; PIDN:AAK75846.1; PID:g14973269; GSPDB:CA;Cross-reference: strain TIGR4
C;Genetics:
A;Cross-reference: strain TIGR4
C;Genetics: A;Gene: SP1772
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            421 SGVSLSSSMNTANSLCLGGTPASASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGP 480
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       541 SASPAPATTPAQPQQSQSQTHHTAQQPFVNPALPPGYSYTGLPYYTGMPSAFQYGPTMFV 600
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        182 KIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQIPISLYSKSLSEP 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            242 LNTSLSMTSAVQ-NSTYTTSVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVS 300
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                                                                                                                                                                                                                                                                                                                                                                           62 QONSTSHPITITSWDLKPPISQSSVLSHLDFKSQPEPSPVLSQLSQRQQHQSQAVIVPPP 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                 122 GLESPPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRRIPPAS 181
                                                                                                                                                                                                                                                                                                      2 APGTGSSTAVNSCSPQSLSSVLGSGFGBLAPPKMANITSSQLLDQLKAPSLGQFTTTPST 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  481 GGLLPAYPIYGYDELQMLQSRLPVDYYGIPFAAPTALASRDRSLANNPYPGDVTKFGRGD
                                                                                                                                                                                                                                                                                                                                    Gaps
                                                                                                                                                                                                                                 Query Match
6.7%; Score 272.5; DB 2; Length 4776;
Best Local Similarity 20.1%; Pred. No. 0.00014;
Matches 146; Conservative 120; Mismatches 374; Indels 87;
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Search completed: January 31, 2005, 17:47:30 Job time : 28 secs

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5.1.6
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GenCore version (c) 1993 - 2005
           Copyright
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sw model - protein search, using OM protein

Run on:

January 31, 2005, 17:38:16 ; Search time 206 Seconds (without alignments) 2195.362 Million cell updates/sec

US-10-509-307-1

1 MAPGIGSSTAVNSCSPQSLS.....LQPKSQASKPAYGNSPYWTN 786 Perfect score: Sequence:

Scoring table:

1825181 segs, 575374646 residues BLOSUM62 Gapop 10.0 , Gapext 0.5 Searched:

1825181 Total number of hits satisfying chosen parameters:

length: 0 length: 2000000000 seq seq DB Minimum I Maximum I

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

UniProt\_02:\*
1: uniprot\_sprot:\*
2: uniprot\_trembl:\* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

STIMMARTES

ro.	Description	O90237 homo sabien	mus m	mus	Q8nc94 homo sapien	mus m	Q9p0h6 homo sapien	homo	mus m	Q8bj01 mus musculu	Q6uwr4 homo sapien	4	Q8cig7 mus musculu	Q8k102 mus musculu	Q6pk34 homo sapien		Q812d5 mus musculu	Q6y2w0 gallus gall	Aap21493 gallus ga	Q6y2w4 gallus gall	Aap21489 gallus ga		Aap21495 gallus ga	Q6y2w1 gallus gall	Aap21492 gallus ga	æ	4 gallı	Œ	Aap21496 gallus ga	Q6y2v6 gallus gall	Aap21497 gallus ga	æ
SUMMARIES	ei Ei	O9P237	Q812D6	Q91VX2	Q8NC94	Q99K40	910060	Q9BTU3	Q80X50	Q8BJ01	Q6UWR4	AAQ89045	Q8CIG7	Q8K102	Q6PK34	AAH07890	Q812D5	QEY2WO	AAP21493	Q6Y2W4	AAP21489	Q6Y2V8	AAP21495	Q6Y2W1	AAP21492	Q6Y2V9	AAP21494	Q6Y2V7	AAP21496	Q6Y2V6	AAP21497	Q6Y2W3
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٠	Query Match	96.2	79.3	79.3	76.0	71.6	43.1	39.4	6	•		37.9		37.2	35.3		34.8	34.3	34.3	34.1	34.1	4.	4	33.9	<u>ښ</u>	۳.	m.	ښ		33.5	'n	33.4
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AAP21490 Q6Y2W2	AAP21491 Q6Y2W7	AAP21486	08BJ53	QBBIT6	Q812D4	Q8BIW4	Q8BZ69	Q80U73	Q9UGL3	Q9UGL4
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1353.5 1353	1353 1295	1295	1234.5	1234.5	1233.5	1213	1135	1092	1088	1027
33	3.4 3.5	36	38	39	40	41	42	43	44	45

## ALIGNMENTS

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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            330 PPSALPSVSSLPSTTSCTALLPSTSQHTGDLTSSPLSQLSSSLSSHQSSLSAHAALSSST 389
                                                                                                                                                                                                                                                                                                                                                                                                                                                                9
                                                                                                                                                                         [1] SEQUENCE FROM N.A. MEDMED 10819331; MEDLINE 20277482; PubMed = 10819331; Megase T., Kikuno R., Ishikawa K., Hirosawa M., Ohara O.; Nagase T. Kikuno R., Ishikawa K., Hirosawa M., Ohara O.; Prediction of the coding sequences of unidentified human genes. XVII. The complete sequences of 100 new cDNA clones from brain which code for large proteins in vitro."; DNA Res. 7:143-150(2000).
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                                                                                                                   Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
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                               Created)
Last sequence update)
Last annotation update)
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   757 AA.
   PRT;
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                             01-OCT-2000 (TrEMBLrel. 15, C
01-OCT-2000 (TrEMBLrel. 15, L
01-MRA-2003 (TrEMBLrel. 23, L
KIAA1491 protein (Fragment).
Name=KIAA1491,
Homo sapiens (Human).
                                                                                                                                                                                                                                                                                                                                                                                                     Conservative
 PRELIMINARY;
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Best Local Similarity
Matches 756; Conserv
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390 SHTHASVESASSHQSSATFSTAATSVSSSASSGVSLSSSMNTANSLCLGGTPASASSSSS 449

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PSOURCE FROM N.A.

SEQUENCE FROM N.A.

SEQUENCE FROM N.A.

STRAIN=MIX FUB/N;

TISSUE=Manumary tumor. WAP-TGF alpha model. 7 months old;

TISSUE=E22388257; PubMed=12477932;

KEDLINE=22388257; PubMed=12477932;

KEDLINE=22388257; PubMed=12477932;

KARAUSHER R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D., Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K., Altschul S.F., Zordan H., Moore T., Max S.I., Wang J., Hsich F., Diatchenko L., Marushina K., Farmer A.A., Rubin G.M., Hong L., Atapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheefer T.B., Stapleton M.J., Usdin T.B., Toshlyuki S., Carninci P., Prange C., A Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J., Bosak S.A., McDwan P.J., McKernan K.J., Malek J.A., Gay L.J., Hulyk S.W., RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
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                                                                                               VSSSESAPGTIMNGHGGGRSQQTLDT----PKTTGPPSALPSVSSLPSTTSCTALLPS
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ASKIPASAVEMPGSADVTGINVOFGALEFGSEPSLSEFGSAPS-SENSNQIPISLYSKSU
                    Bukaryota, Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
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01-DEC-2001 (TrEMBLrel. 19, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Name-Undrin-associated protein 2.
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                  RAAPLVTSGKAPPNIPQGUPPLIHNQYLVGPGGLLPAYPIYGYDELQMLQSRLPVDYYGI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              mus musculus (mouse).
Eukaryota, Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
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79.3%; Score 3214.5; DB 2; Length 1132;
Best Local Similarity 79.0%; Pred. No. 1e-124;
Matches 636; Conservative 46; Mismatches 98; Indels 25;
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MEDLINE=22412137; PubMed=12524348;
Kuniyoshi H., Baba K., Ueda R., Kondo S., Awano W., Juni N.
Yamamoto D.;
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InterPro; IPR009060; UBA_like.
InterPro; IPR00507; UBA; 1.
SMART; SM0165; UBA; 1.
SEQUENCE 1132 AA; 117935 MW; 48F091F992E3659A CRC64;
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Last sequence update)
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Name-Ubap2; Synonyme=1ig-1;
Mus musculus (Mouse)
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           SSLSSHQSSLSAHAAALSSSTSHTHASVESASSHQSSATFSTAATSVSSSASSGVSLSSSM
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Euteleostomi;
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Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              HGNC:14185; UBAP2.
CE 597 AA; 60780 MW; DBDB70598D935F1E CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                     QBNC94;
01-0CT-2002 (TrEMBLrel. 22, Created)
01-0CT-2002 (TrEMBLrel. 22, Last sequence update)
11-0CT-2003 (TrEMBLrel. 23, Last annotation update)
Hypothetical protein FLJ90403.
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                                                                                                                                                                                                                                                                           1132
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Villalon D.K., Muzny D.M., Sodergren B.J., Lu X., Gibbs R.A.,
Pahey J., Helton B., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
Mniting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.;
"Generation and initial analysis of more than 15,000 full-length human
and mouse cDNA sequences.",
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1 MAPGTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITSSQILDQLKAPSLGQFTTTPS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           79.3%; Score 3214.5; DB 2; Length
79.0%; Pred. No. 1e-124;
ive 46; Mismatches 98; Indels
                                                                                                                                                                                                                                                                                                                                               STRAIN=Mix FVB/N;
TISSUE=Mammary tumor. WAP-TGF alpha model. 7 months old;
                                                                                                                                                                                                                                                                                                                                                                                                 Strausberg R.;
Submitted (ARR-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC007179; AAH07179.1; -.
MGD; MGI:1916176; Ubap2.
InterPro; IPR000449; UBA.
InterPro; IPR009060; UBA.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Best_Local Similarity 79.0
Matches 636; Conservative
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                                                                                                                                                                                                                                                                                                                       SEQUENCE
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TISSUE=Adrenal gland;
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Homo sapiens (Human).
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SEQUENCE FROM N.A.

STRAIN=mix FVB/N;

TISSUB-mammary turnor. WAP-TGF alpha model. 7 months old;

TISSUB-Mammary turnor.

A Lissuberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,

ALISCHUI S.F., Zeeberg B.S., Wagner L., Shenmen C.M., Schuler G.D.,

Alischul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

Alischul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,

A Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

By Stapleton M.J., Usdin T.B., Tochiyuki S., Carninci P., Prange C.,

RA, Brownstein M.J., Usdin T.B., Tochiyuki S., Carninci P., Prange C.,

RA, Richards S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

Raba S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,

RA, Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,

RA, Hilalon D.K., Muzny D.M., Sodergren B.J., Lu X., Glibbs R.A.,

RA, Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,

RA, Mitting M., Adan A., Young A.C., Shevchenko Y., Boutfard G.G.,

RA, Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

A Jones S.J., Marra M.A.;

RA, Gones S.J., Marra M.A.;

RA, Gones S.J., Marra M.A.;

RA, Gones S.J., Marra M.A.;

RA, Gones S.J., Marra M.A.;

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                   159 SVSVHQPQPKHIKLAKRRIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFG
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                                                                                                     786
                                                                                                  PFLHILPAHOOPHSOLLHHHLPODAOSGSGORSOPSSLQPKSQASKPAYGNSPYWTN
                                                                                                                                   Bukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleogtomi,
Mammalia, Butheria, Rodentia, Sciurognathi, Muridae, Murinae, Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Query Match 71.6%; Score 2902; DB 2; Length 700; Best Local Similarity 80.9%; Pred. No. 4.7e-112; Antches 571; Conservative 39; Mismatches 72; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STRAIN=mix FVB/N;
TISSUE=Mammary tumor. WAP-TGF alpha model. 7 months old;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Strausberg R.;
Submitted (MAR-2001) to the EMBL/GenBank/DDBJ databases.
EMBL, BC0054821, AAH05482.1; -.
MGD, MGI:1916176, Ubap2.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       71456 MW; DD2C8296DCA5F8ED CRC64;
                                                                                                                                                                                                                                                                                                                                              Created)
Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
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                                                                                                                                                                                                                                                                                                                                                01-UNA-2001 (TrEMBLrel. 17,
01-UNA-2001 (TrEMBLrel. 17,
01-OCT-2003 (TrEMBLrel. 25,
Ubap2 protein (Fragment).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             and mouse cDNA sequences.
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                                                                                                                                                                                             200
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                                                                                                                                                                                                                                                                                                                                     561 HHTAQQPFVNPALPPGYSYTGLPYYTGMPSAFQYGPTMFVPPASAKQHGVNLSTPTPPFQ
                                                                                                                                                                                                                                                                                                                                                                                                         QASGYGQHGYSTGYDDLTQGTAAGDYSKGGYAGSSQAPNKSAGSGPGKGVSVSSSTTGLP
                                                                                                                                                                                                                                                                                                                                                                                                                             DMTGSVYNKTOTFDKOGFHAGTPPPFSLPSVLGSTGPLASGAAPGYAPPFLHILPAHOO
                                                                                                                                                                                                                     19; Gaps
                                                                                                                                                                                                                                                                  RLPVDYYGIPFAAPTALASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPQQSQSQT
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                                                                                                                                          ------GDLTSSDLSQLSSSLSSHQSSL-S
                                                                       381 AHAALSSSTSHTHASVESASSHQSSATFSTAATSVSSSASSGVSLSSSMNTANSLCLGGT
                                                                                                                                                                                             PASASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYPIYGYDELQMLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Bukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Butheria; Primates; Catarrhini; Hominidae; Homo.
NCBI_TaxID=9606;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Gu Y., Fu S., Ren S., Jin W., Gu J., Huang Q., Dong H., Yu Y., Wang Y., Chen Z., Han Z.;
Wang Y., Chen Z., Han Z.;
Submitted (July 1999) to the EMBL/GenBank/DDBJ databases.
EMBL, AF157327, AR57493.1;
InterPro; IPR000449; UBA.
InterPro; IPR0009060; UBA.
InterPro; IPR0000060; UBA.
EMBL, SM00165; UBA, 1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          DB 2; Length 583;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         786
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PHSQLLHHHLPQDAQSGSGQRSQQPSSLQPKSQASKPAYGNSPYWTN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SM00165, UBA; 1.
TE 583 AA; 60706 MW; 65B0F16F16658FA6 CRC64;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               01-0CT-2000 (TrEMBLrel. 15, Created)
01-0CT-2000 (TrEMBLrel. 15, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            45;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   , Match 13, Match 43.1%; Score 1746.5; DB :
Local Similarity 81.2%; Pred. No. 1.6e-64;
hes 345; Conservative 16; Mismatches 45.
                                                          SALPSVSSLPSTTSCTALLPSTSOHT-
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Gaps

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VSSSTTGLPDMTGSVYNKT-QTFDKQGFHAGTP-PPFSLPSVLGSTGPLASGAAPGYAPP 729
                                                                                                                                                                                                                                                                                                                                                                               | :| | : | | : | | : | | | | | : | BASG-----NTFSHHSMVSMLGKGFGDVGEAKGGSTTGSQFLEQFKTAQALAQLAA----
                                                                                                                                                                                                                                    -QHQSQAV----TVPPPGLESFPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQ
                                                                                                                                                                                                                                                          478 PQPAHQKLKQQKKKASLTSKIPALAVEMPGSADISGLNLQFGALQFGSEPVLSDYESTPT
                                                                                                                                                                                                                                                                                                                                                               SSENSNOIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SSGRISTSTILLHISVESEANLHSSSSTFSTISSTVSAPPPV-VSVSSSLNSGSSLGLSLG
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               --TPTPPFQQASGYGQHGYSTGYDDLTQGTAAGDYSKGGYAGSSQAPNKSAGSGPGKGVS
                                                                                                            3 PGTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITSSQILDQLK-APSLGQFTTTPST
                                                                                                                                                                                          SSYDQSSVHNRIPYQSPVSSSESAPGT-IMNGHGGGRSQQTLDTPKTTGP-----PSALP
                                                                                                                                                                                                                                                                                                                                                                                                                                                        --YEQRSTQTR-RYPSSISSSPQKDLTQAKNGFSSVQATQLQTTQSVEGATGSAVKSDSP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SVSSLP---STTSCTALLPSTSQHTG------DLTSSPLSQLSSSLSSHQSSLSAHA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                441 PASASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYP--IYGYDELQML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           SQTHHTAQQPFVNPALPPGYSYTGLPYYT---GMPSAFQYGPTMF-VPPASAKQHGVNLS
                                                                                                                                                                         62 QONSTSHPITITSWDLKPPISQSSVLSHLDFKSQPEPSPVLSQLSQRQ-----
                                                                                                                                                                                                                                                                                                   POPKHIKL -- AKRRIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Best Local Similarity 46.2%; Pred. No. 3.6e-58; Matches 386; Conservative 111; Mismatches 208; Indels 130;
                                              Length 1087;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |||| ||| ||| ||| 947 VNASAIPFOOPSGYGSHGYNT-----
PROSITE; PS50030; UBA; 1.
SEQUENCE 1087 AA; 114543 MW; 03895DCCD570C2F9 CRC64;
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Last sequence update)
                                              score 1599; DB 2;
Pred. No. 3.6e-58;
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                                                39.48;
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01-UUN-2003 (TrEMBLrel. 24
01-MAR-2004 (TrEMBLrel. 24
493431F02Rik protein.
Name-4932431F02Rik;
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                                              Query Match
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Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
Antschenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleron M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.B.,
Brownstein M.J., Usdin T.B., Tooshiyuki S., Carninci P., Prange C.,
Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullahy S.J.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Villalon D.K., Muzny D.M., Sodergren B.J., Lu K., Gibbs R.A.,
Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
Whiting M., Maden A., Young A.C., Shevchenko Y., Bouffard G.G.,
Blakealey R.W., Touchman J.W., Green E.D., Dickson M.C.,
Krzywinski M.I., Skalska U., Smailus D.E., Schnerch A., Schein J.E.,
Jones S.J., Marra M.A.,
Todeneration and initial analysis of more than 15,000 full-length human
                                                                                             711
                                                                                                                                                                                                                     651
                                                                                                                                                                                                                                                               LGSTGPLASGAAPGYAPPPFLHILPAHQQPHSQLLHHHLPQDAQSGSGQRSQPSSLQPKS 771
                                                                          RGDSASPAPATTP----AQPQQSQSQTHHTAQQPFV--NPALPPGYSYTGLPYYTGMPSA
                                                                                                                                                                                                     AGSSQAPNKSAGSGPGKGVSVSSSTTGLPDMTGSVYNKTQTFDKQGFHAGTPPFFSLPSV
                                                                                                                                                                                                                                                                                    479 LGSTGPLAQGAAPGYAPPPFLHILPAHQQPHSQLLHHHLPQDAQSGSGQRSSPA---PCS
                                                                                                                                       FQYGPTMFVPPASAKQHGVNLSTPTPPFQQASGYGQHGYSTGYDDLTQGTAAGDYSKGGY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Eukaryota, Metazoa, Chordata, Craniata, Vertebrata, Buteleostomi,
Mammalia, Butheria, Primates, Catarrhini, Hominidae, Homo.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg R.; Submitted (FBB-2001) to the EMBL/GenBank/DDBJ databases. EMBL; BC003170; AAH03170.1; -- InterPro; IPR000449; UBA. InterPro; IPR009060; UBA_like.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Last sequence update)
Last annotation update)
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              and mouse cDNA sequences.";
Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)
                                                                                                                                                                                                                                                                                                                                                                                                                                         PRT; 1087 AA
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SMART; SM00165; UBA; 1.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      612 YEÓRSTOTR-RYPSSISSPOKDLTOAKNGFSSVOATÓLOTTOSVEGATGSAVKSESPST
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Mus musculus (Mouse).
Bukaryota, Metazoa; Chordata, Craniata; Vertebrata; Buteleostomi;
Mammalia; Butheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Best Local Similarity 45.6%; Pred. No. 2e-57; Andels 126; Matches 380; Conservative 112; Mismatches 215; Indels 126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              DB 2; Length 1107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Strausberg R.;
Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases.
EMBL; BC050910; AAH50910.1; -.
MGD; MG1:1921633; 4932431F02Rik.
INTERPY: IRR000449; UBA.
INTERPY: IPR009060; UBA_like.
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STRAIN=C57BL/6; TISSUE=Brain;
                                                                                                                                                             STRAIN=C57BL/6; TISSUE=Brain;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    and mouse cDNA sequences.
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SMART; SM00165; UBA; 1.
PROSITE; PS50030; UBA;
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560 THHTAQQPFVNPALPPGYSYTGLPYYT---GMPSAFQYGPTMF-VPPASAKQHGVNLS-- 613
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       SSTTGLPDMTGSVYNKT-QTFDKQGFHAGTP-PPFSLPSVLGSTGPLASGAAPGXAPPPF 731
                                                                                          500
                                                                                                                                       848
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                                                                                                                                                                                                                                                                                                              614 TPTPPPOQASGYGQHGYSTGYDDLTQGTAAGDYSKGGYAGSSQAPNKSAGSGPGKGYSYS
386 SSSTSHT--HASVES-ASSHOSSATFSTAATSVSSSASSGVSLSSSMNTANSLCLGGTPA
                           RLPVDYYGIPFAAPTA-LASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPQQSQSQ
                                                                                                                                                                                                                SASSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYP--IYGYDELQMLQS
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STRAIN=C57BL/6J; TISSUE-Head;
MEDLINE=20499374; PubMed=11042159;
Carninci P., Shibata K., Itoh I.
Carninci P., Shibata W., Hayashizaki Y.; Shibata K., Itoh I.
Konno H., Okazaki Y., Muramatsu M., Hayashizaki Y.;
"Normalization and subtraction of cap-trapper-selected cDNAs to
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   732 LHILPAHQQPHSQLLHHHLPQDAQSGSGQRSQPSSLQPKSQASKPAYGNSPYW 784
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
01-MAR-2010s 16 days embryo head cDNA, RIKEN full-length enriched
library, clone:C130046J04 product:NICE-4 PROTEIN homolog.
Name=4932431F02R1k;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus
NCBI_TaxID=10090;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           RIKEN FANTOM Consortium; "Functional annotation of a full-length mouse cDNA collection.";
                                                                                                                                                                                                                                                                                                                                                                                                                                    969 ASATPFQQPSGYGSHGYNT------
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STRAIN=CS7BL/6J; TISSUE=Head;
MEDLINE=9827923; Fubmed=10349636;
MEDLINE=9827923; Fubmed=10349636;
"High-efficiency full-length cDNA cloning.";
Meth. Enzymol. 303:19-44(1999).
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MEDLINE=21085660; PubMed=11217851;
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The FANTOM Consortium,
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GRISTSTILLHTSVESEANLHSSSSTFSTTSSTVSAPPPV-VSVSSSLNSGSSLGLSLGGN 794
                                                                                                                                                                                                                                                                                                                                                                                                      THHTTQQTFLNPALPPGXSYTSLPYYTGVPGLPSTPQYGPAVFPVAPTSSKQHGVNVSVN 973
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 125 SFPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQPQPKHIKLAKRIPPASKIP 184
                                                                                                                                        RLPVDYYGIPFAAPTA-LASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPQQSQSQ
                                                                                                                                                                                                                                                                                                                                                              THHTAQOPFVNPALPPGYSYTGLPYYT---GMPSAFQYGPTMF-VPPASAKQHGVNLS--
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            614 TPTPPFQQASGYGQHGYSTGYDDLTQGTAAGDYSKGGYAGSSQAPNKSAGSGPGKGVSVS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        974 ASATPFQQPSGYGSHGYNT-----GVSVT
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        SSTTGLPDMTGSVYNKT-OTFDKQGFHAGTP-PPFSLPSVLGSTGPLASGAAPGYAPPF
                                                                                                       SASSSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYP--IYGYDELQMLQS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         MEDLINE=22887296; PubMed=12975309; Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J., Clark H.F., Gurney A.L., Crowley C., Currell B., Deuel B., Dowd P., Eaton D., Foster J., Grimaldi C., Gu Q., Hass P.E., Heldens S., Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J., Lewis L., Liao D., Mark M., Robbie E., Sanchez C., Schoenfeld J., Seshagiri S., Simmons L., Singh J., Smith V., Stinson J., Vagts A., Vandlen R., Watanabe C., Wieand D., Woods K., Xie M.H., Yansura D., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I.,
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           effort to identify novel human secreted and transmembrane proteins:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ..
7
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Homo sapiens (Human).
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Eutele
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        05-JUL-2004 (TrEMBLrel. 27, Created)
05-JUL-2004 (TrEMBLrel. 27, Last sequence update)
05-JUL-2004 (TrEMBLrel. 27, Last annotation update)
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Genome Res. 13:2265-2270(2003).
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Matches 308; Conservative
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SEQUENCE FROM N.A.

Adachi J., Aizawa K., Akimura T., Arakawa T., Bono H., Carninci P.,
Adachi J., Aizawa K., Akimura T., Hara A., Hashizume W.,
Pukuda S., Furuno M., Hanagaki T., Hiraoka T., Hirozane T.,
Hayashida K., Hayatsu N., Hiramoto K., Hiraoka T., Hirozane T.,
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Katoh H., Kawai J., Kojima Y., Kondo S., Konno H., Kouda M., Koya S.,
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Tomaru A., Toya T., Yasunishi A., Muramatsu M., Hayashizaki Y.;
Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.

BMBL; MG1:1921633, 4932431F02Rik.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     224 ENSNOIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSS 283
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prepare full-length cDNA libraries for rapid discovery of new genes."; Genome Res. 10:1617-1630(2000).
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                                                                                                                 STRAIN-C57BL/64; TISSUE-Head; MEDLINE-20530913; PubMed=11076861; Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Shibata K., Itoh M., Aizawa K., Nagaoka S., Sasaki N., Carninci P., Sumi N., Ishii Y., Nakamura S., Hazama M., Nishine T., Tachine T., Yamamotco R., Matsumoto H., Sakaguchi S., Ikegami T., Kashiwagi K., Fujiwake S., Inoue K., Togawa Y., Izawa M., Ohara E., Watshiwagi K., Fujiwake S., Inoue K., Togawa Y., Tawa M., Ohara E., Watshiki M., Ohara Y., Ishikawa T., Ozawa K., Tanaka T., Matsuura S., Kawai J., Rike integrated sequence analysis (RISA) system-384-format Genome Res. 10:1757-1771(2000).
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39.0%; Score 1581; DB 2; Length 1112;
Best Local Similarity 45.6%; Pred. No. 2e-57;
Matches 380; Conservative 112; Mismatches 215; Indels 126;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1112 AA; 117276 MW; B46FE706B9622EB3 CRC64;
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InterPro; IPR009060; UBA_like.
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PROSITE; PS50030; UBA;
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244
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                                                                                                                                                                                                                                                                                                                  Clark H.F., Gurney A.L., Abaya E., Baker K., Baldwin D., Brush J., Chaw B., Chui C., Crowley C., Currell B., Deuel B., Dowd P., Eaton D., Foeter J., Grimandi C., Gu Q., Hass P.E., Heldens S., Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J., Seshagiri S., Simmons L., Singh J., Sanith V., Stinson J., Vagts A., Vandlen R., Watanabe C., Wiend D., Woods K., Xie M.H., Yansura D., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A., Wood W.I., Godowski P.,
                                                                               249 SLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES
                                        SLSMTSAVQNSTYTTSVITTSCSLTSSSLNSASPVAMSSSYDQSSVHNRIPYQSPVSSSES
                             ASAVEMPGSADVTGLNVQFGALEFGSEPSLSEFGSAPSSENSNQI PISLYSKSLSEPLNT
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Effort to Identify Novel Human Secreted and Transmembrane Proteins:
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Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                               37.9%; Score 1536; DB 2; Length 363; 96.2%; Pred. No. 4.5e-56; tive 3; Mismatches 7; Indels 2
                                                                                                                                                                                                                                                                                                                                                                                                                                  Bioinformatics Assessment.";
Genome Res. 13:2265-2270(2003).
EMBL, AY358682; AAQ89045.1; -.
SEQUENCE 363 AA; 38824 MW; A7B4524E0AEBD45D CRC64;
                                                                                                                                                                                                                                                   Homo sapiens (Human).
Eukaryota, Metazoa, Chordata, Craniata, Vertebrata,
Mammalia, Eutheria, Primata, Catarrhini, Hominidae;
                                                                                                                                                                                                              Last sequence update)
Last annotation update)
                                                                                                                                                                                  363
                                                                                                                                                                                                     Created)
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                                                                                                                            309 APGTIMNGHGGGRSQQTLDS 328
                                                                                                              305 APGTIMNGHGGGRSOOTLDT 324
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AAQ89045;
02-MAR-2004 (TEMBLrel. 27,
02-MAR-2004 (TEMBLrel. 27,
02-MAR-2004 (TEMBLrel. 27,
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Matches 308; Conservative
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                                                                                                                                                                                                                                                                                NCBI_TaxID=9606;
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37.5%; Score 1520; DB 2; Length 1067;
Best Local Similarity 45.2%; Pred. No. 6.3e-55;
Matches 363; Conservative 109; Mismatches 207; Indels 124; Gaps
                                                                                                                                                                                                                                            Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
NCBI_TaxID=10090;
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Submitted (FEB-2002) to the EMBL/GenBank/DDBJ databases
                                                                                                                                         01-MAR-2003 (TrEMBLrel. 23, Created)
01-MAR-2003 (TrEMBLrel. 23, Last sequence update)
01-MAR-2004 (TrEMBLrel. 26, Last annotation update)
Nice-4 protein homolog, isoform 2.
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                                                                                                              PRT; 1067
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STRAIN-FVB/N; TISSUE-Mammary tumor. C3;
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InterPro; IPR000460; UBA.
InterPro; IPR009060; UBA.
Ike.
Pfam; PF00627; UBA; 1.
PROSITE; PS50030; UBA; 1.
SEQUENCE 1067 AA; 112451 MW;
EMBL, BC023906, AAH23906.1, -.
MGD, MGI:1921633, 4932431F02Rik.
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Blakesley R.W., Touchman J.W.,
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SEQUENCE FROM N.A.
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                                                                                                                              YDQSSVHNRIPYQSPVSSSESAPGT-IMNGHGGGRSQQTLDTPKTTGP----PSALPSV 337
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A Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
A Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,
A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
A Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.,
A Hopkins R.F., Jordan H. Moorer T., Max S.I., Wang J., Hsieh F.,
Biatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
A Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
A Brownstein M.J., Uddin T.B., Toshiyuki S., Carninci P., Prange C.,
A Richards S.S., Worlby K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
A Willalon D.K., Murny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
Villalon D.K., Murny D.M., Sodergren E.J., Lu X., Gibbs R.A.,
A Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G.,
                                                                                   ASSSQAPSSLYTSTASESSTVSSNQS--QESGYQSGPİQSTTYTSQN-NAQGPL----
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                                        ENSNOIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITSCSLTSSSLNSASPVAMSSS
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Mus. Mus.
NCBI_TaxID=10090;
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397 499 442 454 164 223 611 SSIPSLNETVPAASLLTTANQHSSSLSGLSHTEEIPNTTTTQHSSALSTQQNTLSSSTSS 730 ENSNQIPISLYSKSLSEPLNTSLSMTSAVQNSTYTTSVITTSCSLTSSSLNSASPVAMSSS 283 SSLPS---TTSCTALLPSTSQ-----HTGDLTSSPLSQLSSSLSSHQSSLSAHAAL 385 131 GRTSTSTLLHTSVESEANLHSSSSTFSTTSSTVSAPPPV-VSVSSSLNSGSSLGLSLGSN 789 SASSSSSRAAPLVTSGKAPPNLPQGVPPLLHNQYLVGPGGLLPAYP--IYGYDELQMLQS 500 848 559 908 THHTAQOPFVNPALPPGXSYTGLPYYT---GMPSAFQYGPTMF-VPPASAKQHGVNLS-- 613 THHTTQQTFLNPALPPGYSYTSLPYYTGVPGLPSTFQYGPAVFPVAPTSSKQHGVNVSVN 968 614 TPTPPFQQASGYGQHGYSTGYDDLTQGTAAGDYSKGGYAGSSQAPNKSAGSGPGKGVSVS 673 -----GVSVT 992 5 Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S., Krzywinski M.I., Skalaka U., Smailus D.E., Schnerch A., Schein J.E., Jones S.J., Marra M.A.; "Generation and initial analysis of more than 15,000 full-length human PQPKHIKLAKRRIPPASKIPASAVEMPGSADVTGLNVQFGALEFGSEPSISEFGSAP-SS -QHQSQAV----TVPPPGLESPPSQAKLRESTPGDSPSTVNKLLQLPSTTIENISVSVHQ 3 PGTGSSTAVNSCSPQSLSSVLGSGFGELAPPKMANITSSQILDQLK-APSLGQFTTTPST YDQSSVHNRIPYQSPVSSSESAPGT-IMNGHGGGRSQQTLDTPKTTGP-----PSALPSV RLPVDYYGIPPAAPTA-LASRDRSLANNPYPGDVTKFGRGDSASPAPATTPAQPQQSQSQ 386 SSSTSHT--HASVES-ASSHQSSATFSTAATSVSSSASSGVSLSSSMNTANSLCLGGTPA QQNSTSHPTTTTSWDLKPPTSQSSVLSHLDFKSQPEPSPVLSQLSQRQ-----37.2%; Score 1507.5; DB 2; Length 1105; 45.1%; Pred. No. 2.1e-54; Conservative 109; Mismatches 207; Indels Strausberg R.;
Submitted (MAY-2002) to the EMBL/GenBank/DDBJ databases.
EMBL, BC029075; AAH29075.1; -.
MGD; MGI:1921633; 4932431F02Rik.
InterPro; IPR000449; UBA.
InterPro; IPR000606; UBA\_like.
Pfam; PF00627; UBA; 1.
SMART; SMO0165; UBA; 1.
PROSITE; PS50030; UBA; 1. 1105 AA; 116903 MW; 3DD82C85DE1B188A CRC64; Green B.D., Dickson M.C. and mouse cDNA sequences."; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903(2002)

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181 PPFSLPSVLGSTGPLASGAAPGYAPPPFLHILPAHQQPHSQLLHHHLPQDAQSGSGQRSQ 240
                       PSSLQPKSQASKPAYGNSPYWTN 786
                                                                                                               Created)
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                                  02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27, 02-MAR-2004 (TrEMBLrel. 27,
                                                                                                                                                                                                                                                                                                                                                                                                                          CDNA sequences.
                                                                                             PRELIMINARY;
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TISSUE=Brain;
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        35.3%; Score 1433; DB 2; Length 263; 100.0%; Pred. No. 5.6e-52; rive 0; Mismatches 0; Indels (
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                                                                                                                                                  Last sequence update)
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                                                             1053 MHILTPHQQPHSQILHHHLQQDGQ 1076
                                                  732 ІНІГРАНООРНЅОГІННІГРОВАО 755
                                                                                                                                           Created)
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MEDLINE=22388257; PubMed=12477932;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                   and mouse cDNA sequences.
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Best Local Similarity
Matches 263; Conserv
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TISSUB-Brain;

WEDLINE=22388257; PubMed=12477932;

MEDLINE=22388257; PubMed=12477932;

MEDLINE=22388257; PubMed=12477932;

Riausberg R.L., Felingold E.A., Grouse L.H., Derge J.G., Schuler G.D.,

Riausper R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.D.,

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A lischul S.F., Zeeberg B., Buetcw K.H., Schaefer C.F., Bhar N.K.,

A lischenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,

Band Diatchenko L., Marusina K., Parmer A.A., Rubin G.M., Hong L.,

Bronneteln M.J., Ugdin T.B., Toshiyuki S., Carninci P., Prange C.,

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Ray Rodriguez A.C., Grimwood J., Schmutz J., Myers R.M., Butterfield Y.S.,

Ray Marra M.A.,

Rand S.J., Marra M.A.,

Rand S.J., Marra M.A.,

Reneration and initial analysis of more than 15,000 full-length human
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Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases.
EMBL; BC007890; AAH07890.1; -
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                                                                                           Last sequence update)
Last annotation update)
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Best Local Similarity 100.0%; Pred. No. 5.6e-52;
Matches 263; Conservative 0; Mismatches 0;
263 AA.
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